Gordon Institute of Business Science
University of Pretoria

Entrepreneurship in South Africa: A comparative study between the Global Entrepreneurship Monitor, the Global Entrepreneurship Index and opinions of industry experts in the entrepreneurship field.

Stephan Paul Geitlinger

15384803

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Abstract

Economic progress and development has been linked to constructive entrepreneurship; understanding the individual and institutional variables that support entrepreneurial endeavours is thus critical for positive economic development. Measuring these levels of entrepreneurship is a relatively new concept however is ultimately crucial to economic growth. The Global Entrepreneurship Monitor (GEM) and the Global Entrepreneurship Index (GEI) studies are currently the two largest studies of entrepreneurship measurement in the world. This study undertook to identify the validity of these reports in reference to the South African entrepreneurial ecosystem.

The GEM and GEI frameworks were deconstructed and compared to one another as well as to expert's opinions in the field of entrepreneurship within South Africa. Thematic analysis of interviews and GEM and GEI results were also contrasted against one another.

South African experts in the field of entrepreneurship suggested some measurement indicators used in the reports may be flawed. Emergent themes from interviews demonstrate how certain positive social policies may be destructive economic policies. While entrepreneurship does exist, it may be of a destructive nature / economic consequence, such as rent seeking activities. Neither report discusses productive, destructive or unproductive entrepreneurship and does not attempt to measure it. Ultimately both the GEM and GEI do not show any major structural gaps in framework on a global scale however when used locally they do demonstrate subjective gaps in a South African context.

Keywords

Entrepreneurship, South Africa, GEM, GEI

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Stephan Paul Geitlinger

Date

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I would like to thank some notable people that helped me through this year:

To my supervisor, Dr Jonathan Marks, for his guidance and patience through a tough but exhilarating chapter in my life.

To my parents for all the patience, support and understanding over the past year. This is a dream I happily share with you.

To my greatest supporter and truest friend, you gave me hope and believed in me enough that I dared to dream bigger than I thought possible. Thank you for helping me achieve this lifelong dream.

However difficult life may seem, there is always something you can do and succeed at – Stephen Hawking

Table of Contents

List of tables

List of figures

List of abbreviations

DVF	Development Finance
ECO	Economist
FIN	Finance
FIN2	Finance two
GDP	Gross Domestic Product
GEDI	Global Entrepreneurship Development Index
GEI	Global Entrepreneurship Index
GEM	Global Entrepreneurship Monitor
INC	Incubator
LEG	Legal
MENA	Middle East and North Africa
OECD	Organisation for Economic Co-operation and Development
SA	South Africa
SME	Small Medium Enterprises
SMME	Small Medium and Micro Enterprises
SSA	Sub Saharan Africa

1. INTRODUCTION

Economic growth is a major focus for most countries; how they achieve it depends on a variety of conditions from the nature of a countries economic policy to the type of entrepreneurs within the economy (Acs, 2006; Wennekers & Thurik, 1999). Economic development for any country is crucial as it impacts the country's ability to be competitive in the global economy. Beugelsdijk (2010) suggests that entrepreneurial culture may also play a role in economic success, an important issue for South Africa, which has one of the highest unemployment rates in the world (The World Bank Group, 2015). It's widely acknowledged (Acs, 2006; Herrington, Kew, & Kew, 2009; Singer, Amorós, & Moska, 2014a) that entrepreneurship is a driver of economic growth, therefore an understanding of the drivers behind entrepreneurship and how it impacts economic success is an important study that requires further attention.

1.1 Research problem

Entrepreneurship is key for economic growth and prosperity (Acs, 2006, 2010; Beugelsdijk, 2010; Brouwer, 2002; Naudé, 2008; Netherlands, 2008; Wennekers & Thurik, 1999). To understand what entrepreneurship is and what it does may vary between theorists, nevertheless it remains a key focus in current society. The measurement of entrepreneurship is a relatively new concept and an underrepresented field of study (Marcotte, 2013). Measurement of entrepreneurship may go a great distance in supporting economic development through international, national and regional policy planning.

The Global Entrepreneurship Monitor (GEM) report and the Global Entrepreneurship Index (GEI) report are currently the two largest studies of entrepreneurship in the world (Álvarez, Urbano, & Amorós, 2014). With entrepreneurship being an underrepresented field of study and the importance of entrepreneurship to society, the question of accuracy and relevance appears to be worthy of further examination.

The current study seeks to understand the extent to which the current global studies on entrepreneurship such as the Global Entrepreneurship Monitor (GEM) and Global Entrepreneurship Index (GEI) accurately reflect a complete picture of entrepreneurial activity in South Africa, and whether these reports are comparable. Furthermore to what extent do

these reports reflect the opinions held by industry experts on the current state of entrepreneurship in the country?

1.2 Research motivation

Every economy in the world is intrinsically linked to one another to form part of the global economy or global economic ecosystem. It is thus important to understand how South Africa as a country fits into this global economic ecosystem and how South African institutions affect economic growth and development. Furthermore, to understand how entrepreneurship impacts economic development, it is important to understand how the entrepreneur thinks, acts and feels about entrepreneurship.

Acs (2006) discusses how countries require a balanced approach to General National Framework conditions and Entrepreneurial Framework conditions and that the balance depends on the countries level of economic development. Less developed economies should focus their policies on a balance of both strengthening General Nation Framework conditions and Entrepreneurial Framework (Acs, 2006). Entrepreneurship can be managed, influenced and enhanced both in a national and local framework context (Levie & Autio, 2008). Thus understanding these variables and their impact into the South African economy may result in a greater understanding for both academics and business. Ultimately the measurement of entrepreneurship variables is critical in understanding how to influence the economic ecosystem in a positive manner.

Acs and Szerb (2007) discuss the concept of entrepreneurial capitalism and how economies that have moved from a “managerial economy” into an “entrepreneurial economy” have become more agile and responsive. Firms within entrepreneurial economies have displayed more dynamic company structures and have shown how markets and individual firms have replaced bureaucracies.

Innovation and management of innovative technologies is a key differentiating factor in an entrepreneurial economy in that there is greater risk taking and more radical breakthroughs of technologies (Acs & Szerb, 2007; Luiz & Mariotti, 2011). Furthermore, the innovative ideas and technologies create employment and productivity growth through commercialisation of these high quality innovations. These spill-overs may also create employment regionally and nationally which may affect long term growth and sustainability for small and medium enterprises (SME).

According to Luiz and Mariotti (2011), South Africa is not producing an entrepreneurial economy that adequately meets the needs of the country, which needs to be addressed. If entrepreneurial activity is adequately addressed it may affect and create employment, expand current markets, increase productivity, revitalise and address past social injustices within communities (Luiz & Mariotti, 2011). Luiz and Mariotti (2011) discuss how entrepreneurship creates employment and increases productivity to produce and commercialise new business. In a study by Ayyagari, Beck and Demirguc-Kunt (2007), of 76 countries analysed, SME contributed 64% of Gross Domestic Product to the economy (Ayyagari, Beck, & Demirguc-Kunt, 2007).

A conducive growth environment in any ecosystem may spur on future growth, which may become self-sustainable. An environment conducive to labour absorption and entrepreneurship is critical to economic growth (Mahadea, 2012). Mahadea (2012) discusses how entrepreneurial action gives rise to growth and employment in a country and that the economic environment may flourish from investment friendly economic policies. With a focus on an expanding entrepreneurial spirit and moving from a management economy to an entrepreneurial economy (Acs & Szerb, 2007) specifically focusing on property rights, high levels of savings and investment, improved education, and constructive productivity as well as equality of opportunity for all within the society can only lead to prosperity (Mahadea, 2012).

To the **global** economic platform, entrepreneurship may be affected by government policies, which may advance or restrict economic growth. When promoting entrepreneurship, governments need to look at global policies and not just national or local policies. Trade policies that have a focus on freedom of firms and individuals recognise and benefit from specialization, economies of scale and comparative advantage, which combined maximise the return for economies. Through restrictions in global policy, firms are essentially held back (Acs & Szerb, 2007; Acs, 2010).

To **national policies** with a long-term outlook, national policy makers should consider monetary and fiscal imbalances that create uncertainty. These imbalances deter would-be investors from following or acting out entrepreneurial impulses. National policies around education are also a focus and clearly a prerequisite for continued economic growth (Acs & Szerb, 2007; Acs, 2010; Farrington, 2012; Luiz & Mariotti, 2011). A focus on primary, secondary, tertiary and higher education is essential for success and prosperity of any

nation. However, while education may increase awareness of entrepreneurship in general, it does not support and enhance entrepreneurial intentions (Farrington, 2012).

To a **regional policy** focus and the promotion of local business, while good for a local area (local ecosystems) is also good for national economic development (Acs & Szerb, 2007). South Africa has a unique situation in that previously disadvantaged populations reside in remote areas. Historically the focus was on attracting “new” business from other locations and was seen as constructive, however it is now known to not be as efficient and effective as business creation in new areas (Acs & Szerb, 2007). The spill-overs and creation of clusters support local and national economic growth (Rocha & Sternberg, 2005), additionally growth in remote areas for South Africa would have a positive social impact.

1.3 Research objectives

The current study seeks to investigate and recognise the importance of the Global Entrepreneurship Monitor (GEM) and Global Entrepreneurship Index (GEI) reports to entrepreneurial development in South Africa. The current study was a comparative examination between these two reports in order to determine their relative importance to the South African environment.

1.4 Research scope

The current study will be as detailed as possible while allowing for data limitations and time constraints. The study will be conducted through desktop research and interviews, where appropriate. The proposed reports include the Global Entrepreneurship Monitor and Global Entrepreneurship Index reports. These reports are available to the general public however obtaining interviews with the authors of these papers proved difficult. It was advantageous to interview industry experts on entrepreneurship in a variety of fields in order to obtain a comprehensive view of entrepreneurial activity in South Africa.

1.5 Chapter Summary

This chapter serves to motivate the need for further study and research into the measurement of entrepreneurial indicators. While entrepreneurship is a focus for academics as well as economic policy makers, the question remains - is there sufficient research and knowledge in the space of entrepreneurial measurement? And, do the studies available effectively and accurately represent the actual state of entrepreneurship in South Africa? Armed with detailed knowledge of the length, breadth and depth of entrepreneurship, policy

makes may be able to make accurate decisions that can positively affect all South Africans and lead to a prosperous future.

2. THEORY AND LITERATURE REVIEW

2.1 Introduction

The purpose behind this literature review is to present relevant concepts and ideas as well as present an overview of the information that has been covered relating to this topic that will assist in supporting the study.

The measurement of entrepreneurship is a relatively new concept and an underrepresented field of study (Marcotte, 2013), however it is critically important to economic and social development in current times. Understanding the definition and theory behind what entrepreneurship is and what it does is important before one can begin to unpack how entrepreneurship affects economic development.

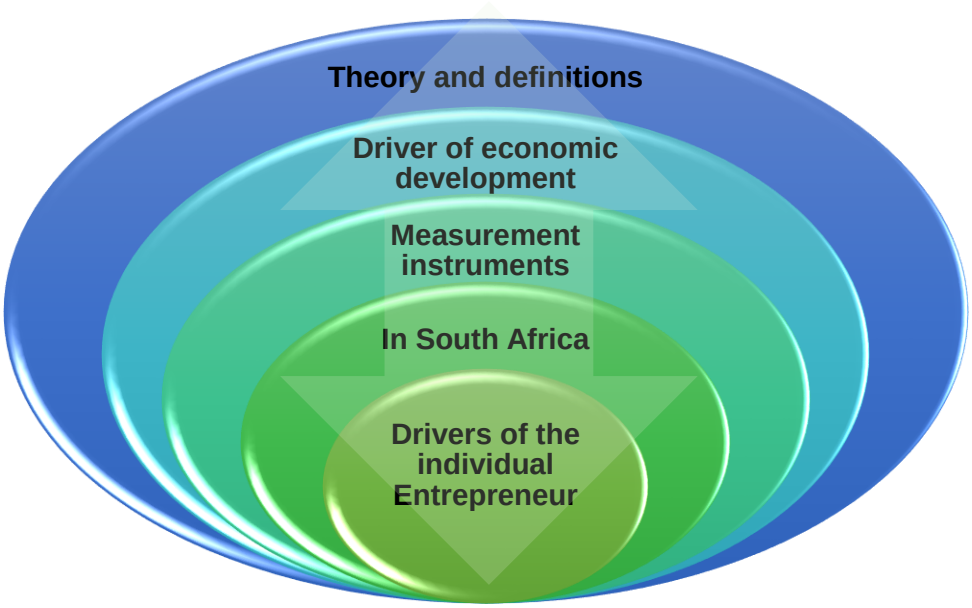
Understanding the driving forces behind entrepreneurship and understanding what economic stage a country is in, through Porter's three-stage model, or how entrepreneurship builds economic development from theory to policy through understanding the Wennekers and Turik (1999) model may assist in understanding what the GEM and GEI reports are and what they mean. Through to the individual entrepreneur and what motivates them and how their behaviour affects economic development. The makeup of this chapter is shown diagrammatically in figure one below.

2.1.1 Elements of the literature review

This literature review covers five main topics of discussion as shown in the figure below. The literature review will begin with the theory behind entrepreneurship in the global sense, following into entrepreneurship as a driving force for economic development globally into the South African context. Then it will move to understanding the state of entrepreneurship within the South African context and conclude with the individual entrepreneur and their role in the entrepreneurial ecosystem. Each topic has an influence on the other topics and can be regarded as one ecosystem within another becoming more finite.

The literature review is comprised of the following sections as listed in figure 1 below. The figure demonstrates how each topic under discussion in the literature review is linked with one another forming an economic ecosystem.

Figure 1: Literature review construct



Source: Geitlinger (2015)

2.2 Entrepreneurship: Theory and Definition

Most entrepreneurship theorists agree that entrepreneurship is important, notwithstanding the fact that there is a great deal of debate as to its definition and what it actually means (Acs, 2010; Brouwer, 2002; Marcoux, 2012; Wennekers & Thurik, 1999). Three of the more notable thinkers in entrepreneurship, being Joseph Alois Schumpeter (1883 – 1950), Frank Hyneman Knight (1885 – 1972) and Israel Kirzner (1930 -), may agree to what entrepreneurship is, however their thoughts differ as to what the entrepreneur does.

Kyro (2015), Marcoux (2012) and Brouwer (2012) offer their views of how Schumpeter, Knight and Kirzner view the entrepreneurial act, the occurrence of the entrepreneurial act and the effect on the economy by entrepreneur and entrepreneurial act. These thinkers describe the entrepreneurial act in different ways. Schumpeter (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) sees the entrepreneurship act as a creative form, the founder of the new firm being styled as an innovator; that idea creation is creative in itself and follows a novel

and innovative pathway. Thus the entrepreneur is the creative catalyst in the equation that starts the motion or the newest endeavour. Knight (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) looks at entrepreneurship through the lens of probabilities and distinguishes between the risk and reward of the potential outcome for the entrepreneur and assigns probabilities to it. Knight (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) further argues that the endeavour or act is a probability based outcome without uncertainty. Kirzner (Kyrö, 2015; Marcoux, 2012) believes that the entrepreneurial act is not creative but comes from discovery. Kirzner (Kyrö, 2015; Marcoux, 2012) perceives that there are abundant opportunities that people discover over time; that the entrepreneur identifies a gap or a difference between the current state of being and an alternative state of being or perceived state of being and that the entrepreneur fills the gap in an arbitrage moment.

Schumpeter (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) sees the act as a new norm or, as he termed it, “creative destruction”. The entrepreneur creates a new form from the destruction of the old form. Schumpeter (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) believes this action does not occur often in the marketplace, whereas Knight (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) believes the action is more commonplace and argues that the entrepreneur understands the market place and the risks associated with his/her action and takes calculated risks (probability) to pursue the endeavour. Kirzner (Kyrö, 2015; Marcoux, 2012) understands the endeavour not as a pursuit but as a perceived opportunity and that the perception of the difference in states occurs often to the entrepreneur.

The effect on the marketplace also varies between these thinkers. Schumpeter (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) believed that through creative destruction the entrepreneur disrupts the economic system or environment; that new standards are formed and broken repeatedly and that there is a constant state of flux between market equilibrium and market disequilibrium. Knight (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) saw the act of entrepreneurship as an equilibrating action in the marketplace; that the entrepreneur identifies the risks and attempts to close the gap and equalise the risk and reward. Kirzner (Kyrö, 2015; Marcoux, 2012) understands the market place to be in a constant state of disequilibrium and that the entrepreneur tries to close the gap between the supply and demand side of the economy.

In summary, the three differing views discussed above provide alternatives but not conclusions to the idea of entrepreneurship. Schumpeter (Brouwer, 2002; Kyrö, 2015;

Marcoux, 2012) sees the entrepreneur as any one that creates new ideas and innovates and through that act brings about a new process or product into the marketplace. Knight (Brouwer, 2002; Kyrö, 2015; Marcoux, 2012) sees the entrepreneur as the shareholder; the person or group of people that will gain a profit or suffer the loss though the endeavour, ultimately the person who takes the risk. Kirzner (Kyrö, 2015; Marcoux, 2012) sees the entrepreneur as the person who perceives an opportunity for profit.

2.3 Entrepreneurship as a driver of economic growth and development

"Joseph Alois Schumpeter pointed out over one hundred years ago that entrepreneurship is crucial for understanding economic development" (Acs, 2010, p. 1). The role of entrepreneurship in economic development is in part explained by Naudé (2008) in that the structural transformation of a country from lower income to higher income based economies is through entrepreneurship (Naudé, 2008).

Static general concepts of the workings of economies are inadequate when trying to explain the changes in economic cycles of countries and economic progress (Schumpeter, 1934). The dynamics of the process of development can be different depending on the institutional context and level of development within an economy (Acs, 2010). Bridging the gap between economic and entrepreneurial thought and theory to policy and finally to action is always challenging.

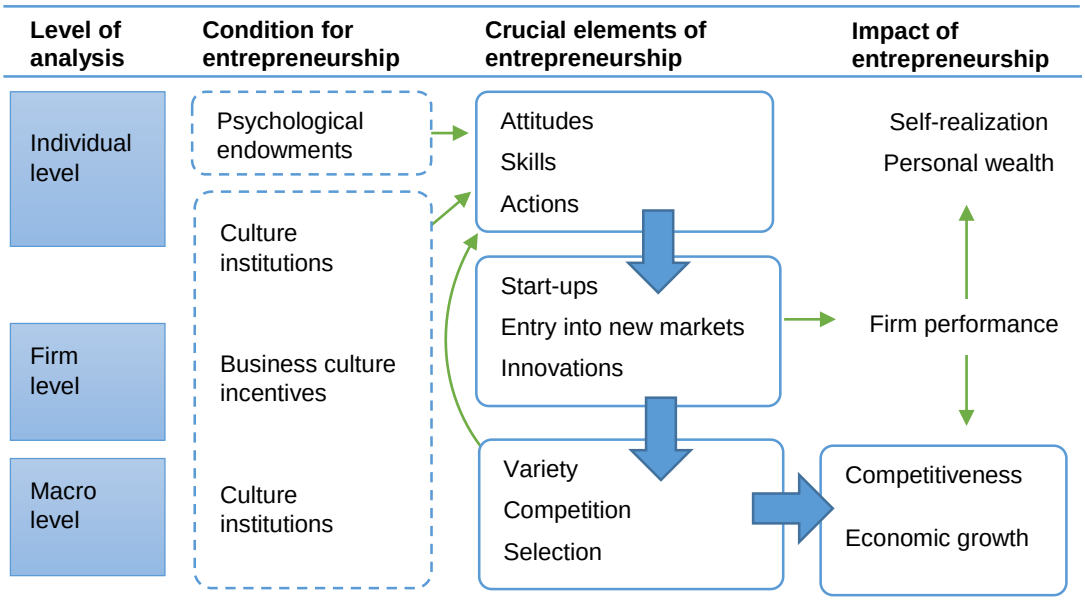
The Wennekers and Turik (1999) model (Figure 2 below) tries to link these concepts together. The authors identify this through three levels of analysis: individual level, firm level and macro level (UNCTADstat, 2013; Wennekers & Thurik, 1999). As the entrepreneur is not void of institutional influences nor is the entrepreneur free from influences of the macro economy or forces at large, the three levels are interlinked and thus need to be discussed on this basis.

The individual level, which is the base of entrepreneurship as it is the smallest dividable unit in the model. The entrepreneur is influenced by the conditions for entrepreneurship such as psychological endowments, business culture and institutional culture. The conditions for entrepreneurship all affect crucial elements of the entrepreneur such as their attitude, skills and actions; if conducive, will support start-ups and entry into new markets or the

development of products or services in existing markets. Ultimately feeding economic growth through competitiveness.

From the individual level, the entrepreneur now takes action at the firm level; where the entrepreneur transforms their personal ambitions and qualities into action. This takes the form of creation or innovation of a new product or service at either a large or small firm. The availability of competition will provide for vital feedback for growth from failures or successes of other firms. These spill overs allow other industries to grow and improvement of other sectors of an economy. This also provides for feedback into the individual level and affects the entrepreneurial attitudes, skills and actions. Provided the required business and cultural incentives are in place, the entrepreneurial process reinforces its self. This allows for incentives for additional firms to enter the marketplace spurring on economic development.

Figure 2: Linking entrepreneurship to economic growth



Source: Linking Entrepreneurship and Economic Growth (Wennekers & Thurik, 1999)

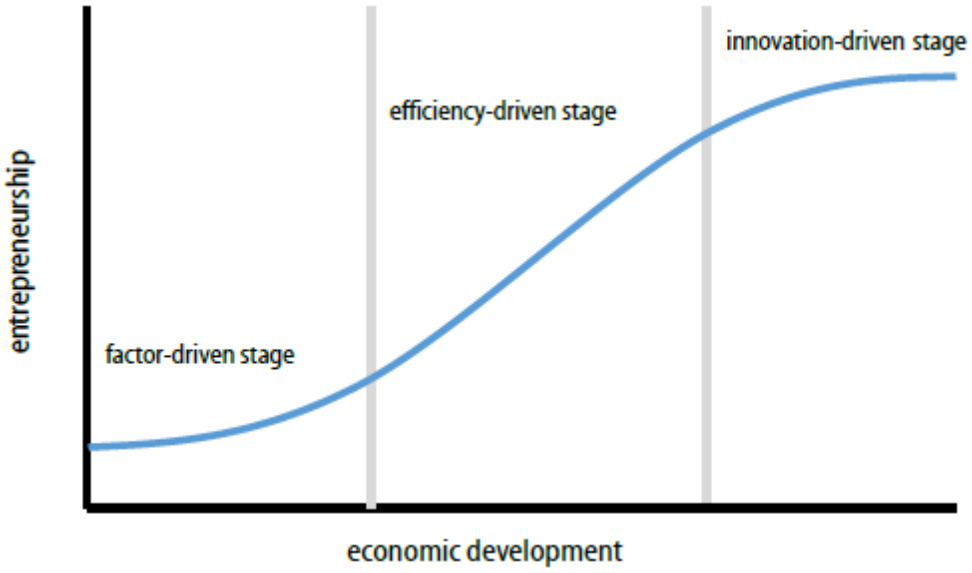
Mathews (2002) discusses how firms are competitive on the most basic level through competition for resources; that the struggle for resources is at the centre of the driving force

of the capitalist economy (Mathews, 2002). Acs (2010) argues that there is a correlation between the stages of economic development of countries and the arrangement of the countries workforce.

The relationship between entrepreneurship and economic development is found to be S-shaped curve (Acs, 2010). The S-shaped curve represents assigned stages of entrepreneurial development within economies and is shown in Figure 2. Acs (2010) suggests that the workforce may be classified into three groups namely productive, destructive or unproductive. Acs (2010) argues that it is the manner in which these groups are arranged and the transition from one group to the next that results in an economy moving from lower stages to upper stages of the graph.

As institutions are strengthened, more entrepreneurial activity is shifted towards productive entrepreneurship, strengthening the economy (Acs, 2010). It is also the manner in which institutions and culture support entrepreneurship that results in economic development as show in the Wennekers and Turik model above (figure 1).

Figure 3: The relationship between entrepreneurship and economic development (Acs, Autio, & Szerb, 2015)



Source: Global Entrepreneurship Index (Acs et al., 2015)

2.4 Entrepreneurship measurement institutions

There are a number of institutions nationally and around the world that focus on measurement of entrepreneurship in varying degrees. As measurement of entrepreneurship is regarded as a relatively new concept and an underrepresented field of study (Acs, Autio, & Szerb, 2014; Marcotte, 2013) this section will look at organisations / institutions that attempt to measure entrepreneurship.

2.4.1 Global Entrepreneurship Monitor Report

The Global Entrepreneurship Monitor report measures at least 2,000 randomly selected adult individuals in countries around the world. Since GEM's inception it has attempted to explore interdependencies between entrepreneurship and economic development (Herrington, Kew, & Kew, 2014). GEM conducts this study and analysis through a longitudinal study and comprehensive analysis of attitudes and activity from around the world. From inception, GEM has measured entrepreneurship in over 100 countries on all economic levels around the world. The economies that are represented in the GEM analysis are show in table 1 below:

Table 1: GEM economies by location and economic development level, 2014

	Factor-driven Economies	Efficiency-driven Economies	Innovation-driven Economies
Africa	Angola[1], Botswana[1], Burkina, Faso, Cameroon, Uganda	**South Africa**	
Asia & Oceania	India, Iran[1], Kuwait[1], Philippines[1], Vietnam	China, Indonesia, Kazakhstan[2], Malaysia[2], Thailand	Australia, Japan, Singapore, Taiwan, Qatar
Latin America & Caribbean	Bolivia[1]	Argentina[2], Barbados[2], Belize, Brazil[2], Chile[2], Colombia, Costa Rica[2], Ecuador, El Salvador, Guatemala, Jamaica, Mexico[2], Panama[2], Peru, Suriname[2], Uruguay[2]	Puerto Rico, Trinidad and Tobago

	Factor-driven Economies	Efficiency-driven Economies	Innovation-driven Economies
European Union		Croatia2, Hungary2, Lithuania2, Poland2, Romania	Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovenia, Slovakia, Spain, Sweden, United Kingdom
Non-European Union		Bosnia and Herzegovina, Georgia, Kosovo, Russian Federation[2], Turkey[2]	Norway, Switzerland
North America			Canada, United States

1. In transition to efficiency-driven economies
2. In transition to innovation-driven economies

Source: 2014 GEM South Africa Report (Herrington et al., 2014)

The Global Entrepreneurship Monitor report collects primary data worldwide, distinguishing it from other measurement tools. The GEM focuses on the individual entrepreneurs' attitudes, intentions and activity as most business start with a single individual or small teams. The GEM has a systematic uniform process of data collection through the world. The uniformity allows for consistency and reliability of results. Official statistics in developing nations are often not able to track entrepreneurial activity adequately. GEM is able to track informal entrepreneurial activity which official statistics do not capture (Global Entrepreneurship Research Association, 2015).

Entrepreneurship is multi-dimensional as discussed in the Wennekers and Turik (1999) model (Figure 1 above). GEM does not cover institutional variables which play a crucial role in economic development (Acs, 2010). GEM allows for data collection through associates through various collection techniques (telephone, interviews, etc.) and does not control primary data collection. Each country is responsible for submission of data to GEM which allows for errors in data collection. There is also variability in quantum of data collected.

Barbados and Croatia conducted 2,000 adult population surveys in 2014 while Brazil conducted 10,000 and Spain 25,000 surveys. This may lead to inaccurate data and skewed results (Singer et al., 2014a).

2.4.2 Global Entrepreneurship and Development Institute

The Global Entrepreneurship and Development Institute is a research institution that studies economic development and prosperity of countries around the world (Acs & Szerb, 2010). The GEDI produces a variety of reports on a national, regional and local level such as the Global Entrepreneurship Index (GEI), The Female Entrepreneurship Index, Santander Enterprise Index and Region Index (European regions). The GEDI combines individual level data with institutional level data as well as economic and demographic data to produces a holistic viewpoint of a counties entreprenerial status. The GEDI then ranks each county numerically based on a a serials of scoring mechanisms. The 10 most entrepreneurial countries in 2014 can be see in table 2 below:

Table 2: The ten most entrepreneurial countries in 2014.

Country	GEI 2014	Rank 2014	GEI 2013	Rank 2013
United States	82.5	1	82.6	1
Australia	77.8	2	78.2	2
Sweden	73.7	3	73.3	3
Denmark	72.5	4	69.7	8
Switzerland	70.9	5	69.8	7
Taiwan	69.5	6	66.2	11
Finland	69.3	7	64.9	13
Netherlands	69.0	8	73.1	4
United Kingdom	68.6	9	70.3	6
Singapore	67.9	10	62.0	18

Source: The Global Entrepreneurship and Development Index 2014

The Global Entrepreneruship Index does not mearly count new firm creation or benchmark policy making in each country it considers characteristics of the entrepreneur and entrepreneruship such as the ability to be innovative, market expansion / growth orientated and having the ability to look to international markets (Acs et al., 2015). Entreprenurship

may have a different impact depending on the country and context under discussion. The GEI combines individual data together with institutional data to provide a more comprehensive view of entrepreneruship in a country. This should demonstrate a more comprehensive view of entreprenerial activitiy in each country.

The GEI also ranks each country based on a scoring mechanism; the ranking allows countries to compare strengths and weaknesses of a system. This may allow for countries to adapt and improve institutiuonal regulations that may be limiting entreprenerial growth (Acs, 2010).

The GEI does not collect primary data on individual entrepreneruship. The data is obtained from the GEM consortium (Acs et al., 2015). The adult population survery used by GEM is also not standardised in that Barbados and Croatia conducted 2,000 adult population surveys in 2014 while Brazil conducted 10,000 and Spain 25,000 surveys. While a minimum is set for acceptance of data and inclusion of a country into the report, the survey number / quantity is variable. This is an important factor as the GEI ranks countries based on a scoring matrix. The scores may not be reflective of true entrepreneurial stats within a country when compared to other countries.

2.4.3 World Bank Group Entrepreneurship survey / report

The World Bank Group has two major goals in ending extreme poverty and promotion of shared prosperity. The World Bank's data and research department is the principal research unit that produces research at a country and regional level. The World Bank's Entrepreneurship Survey relies primarily on data from national registries. The study includes analysis of companies, countries and industries globally and includes analysis of company and owner characteristics relating to entrepreneurship. The data is analysed and interpreted with reference to the effect of entrepreneurship on industry performance and activity across countries and over time. The data also give valuable information between company, the regulatory environment, and economic growth (Acs et al., 2014)

The reliance on national registries may be problematic as each country may measure entrepreneurial behaviours differently. Additionally, countries at different stages of economic development may measure entrepreneurship differently (Acs et al., 2014; Naudé, 2008).

2.4.4 Organisation for Economic Co-operation and Development

The Organisation for Economic Co-operation and Development (OECD) promotes policies that will attempt to improve the economic and social well-being of people around the world. (Ahmad & Hoffman, 2008). The OECD measures productivity and global flows of trade and investment analysing data and predicting trends.

The OECD produces a number of publications including;

- Economic Outlook - which assesses various counties economic outlooks,
- Factbook – Which is primarily a reference tool for working on economic and policy issues,
- Economic surveys – which provide individual national analyses and policy recommendations
- Going for Growth – which presents comparative indicators and evaluations of national performance.

The most notable publication the OECD produces is a framework for addressing and measuring entrepreneurship. The framework looks at entrepreneurship by focusing on; Factors impeding or motivating entrepreneurship (determinants), Measurements that are indicators of the state of entrepreneurship in an economy (entrepreneurial performance) and Outcomes which is generally regarded as the performance of an economy (impacts) (Ahmad & Hoffman, 2008).

The main focus of the OECD is deliberately targeted towards business related entrepreneurship and ignores social entrepreneurship. The major social and economic objectives for the OECD framework and reports are in a context of job creation, economic growth and poverty alleviation (Ahmad & Hoffman, 2008).

2.5 Entrepreneurship in South Africa

Apartheid, arguably one of the biggest challenges South Africa has ever faced, has left the country with a multitude of problems. Achieving its freedom in 1994, with the first democratic elections, South Africa faced many serious challenges; positive economic development of the country and the inclusion of previously disadvantaged populations into the economy has led to entrepreneurship becoming critical to job creation and economic growth (Mahadea, 2012).

Entrepreneurial development of a country may be broken down into three basic forms; productive, destructive or unproductive (Acs, 2010). Acs (2010) further argues that there is an interdependence between incentives and institutions and that these two interdependencies affect the quality of governance, access to resources and capital and perceptions of entrepreneurs. To change and improve entrepreneurial development in a country between the three basic forms, one needs to change the incentive structure. To change the incentive structure of a country, improvements in institutions are required and are only possible when government and its own policies are working efficiently and effectively.

Once South Africa emerged from apartheid it had a difficult task ahead of itself in that it not only had to tackle past injustice, it also had to contend with global influence and pressure on its economy. Early in South Africa's independence the government released a white paper on national strategy and its goals for small business (Berry, Blottnitz, Cassim, Kesper, & Seventer, 2002; Department: Trade and Industry. Republic of South Africa, 2005). This was the first time a policy and strategy on small business development was formulated in South Africa (Department: Trade and Industry. Republic of South Africa, 2005).

Small medium and micro enterprise (SMME) was later not able to transform South Africa's small business sector into a growing sustainable sector of the economy (Berry et al., 2002). Surveys by the World Bank in the Johannesburg area have also failed to explain the failure (Berry et al., 2002). SMME's limited success and failure in an economy is therefore not static and independent of itself. Macroeconomic factors play a vital role in development of the entire economy.

In January 2010, South Africa had an unemployment rate of 25.1% (Statistics South Africa, 2015). In the same year, Accelerated and Shared Growth Initiative South Africa (AsgiSA)

tried to link, through policies, strategies and programmes, small business promotion and enterprise growth to opportunities derived from the 2010 FIFA World Cup (Department: Trade and Industry. Republic of South Africa, 2005).

President Jacob Zuma, in his state of the nation address in 2015 set out a nine-point plan to ignite growth and create jobs in South Africa. Specifically to SMME's, that government will set aside 30% of appropriate categories of state procurement for purchasing from SMME's. Zuma stated that government will continue to promote opportunities for the youth and that the National Youth Development agency in 2014 distributed R25 million to 765 youth-owned micro enterprises (Zuma, 2015). According to Statistics South Africa, South Africa had an unemployment rate of 26.4% in January 2015. Solving South Africa's unemployment issues is a major focus of Government and they have outlined proposed actions in its National Development Plan (NDP) (National Planning Commission, 2012).

In the National Development Plan the South African government outlines its goals to 2030. Most notable critical issues are to reduce poverty and raise employment and investment in South Africa. The NDP is also focused on private investment in labour intensive areas, Black and Gerwel (2014) argue that to solve unemployment issues a focus on employment intensive growth is required.

Other South African economic milestones include increasing employment from 13m people in 2010 to 24m in 2030; creating 11m jobs by 2030 and raising per capita income from R50 000 in 2010 to R120 000 by 2030 (National Planning Commission, 2010).

The NDP outlines how new employment is likely to be sourced in domestic orientated businesses, and in growing small and medium sized firms (National Planning Commission, 2010). Since macroeconomic growth over the last few years has been modest, it may be concluded that small and medium enterprises have not lived up to their potential. "South Africa's SMME economy suffers from poor implementation of policy initiatives which are in turn woefully inadequate" (Berry et al., 2002, p. 93)

2.6 What drives the individual entrepreneur

Entrepreneurship can only occur when two ingredients are present, namely an entrepreneur and an opportunity for the entrepreneur to exploit (Osiri, 2015). Should one ingredient be missing the entrepreneurial process cannot take place. Osiri (2015) discusses the process that the entrepreneur goes through before they are able to exploit the opportunity which is known as the entrepreneurial process.

Understanding the motivation and influencing factors that support the entrepreneur will assist with understanding how to influence the entrepreneurial process positively or negatively. Understanding what drives the entrepreneur and the processes they go through is an important study as entrepreneurship provides individuals with a remarkable freedom to pursue their own dreams, goals and ideas. The concept of entrepreneurship is one of intention with an emphasis on opportunity. Furthermore, entrepreneurship is a great activity for economic mobility, job creations, wealth creation, innovation and economic growth (Ali & Topping, 2011; Soomro & Shah, 2015).

Research has found (Soomro & Shah, 2015) that entrepreneurs can be taught and that entrepreneurship programmes have a positive influence to encourage individual attitudes towards entrepreneurship (Daley, 2013). Entrepreneurship attitudes may predict entrepreneurship intentions which may lead to entrepreneurship behaviours. The act or behaviour is ultimately the resultant factor required for the creation of these growth factors such as economic development and others listed above. However, without the catalyst being the entrepreneurial attitude, obtaining a behaviour is increasingly difficult (Ali & Topping, 2011; Soomro & Shah, 2015).

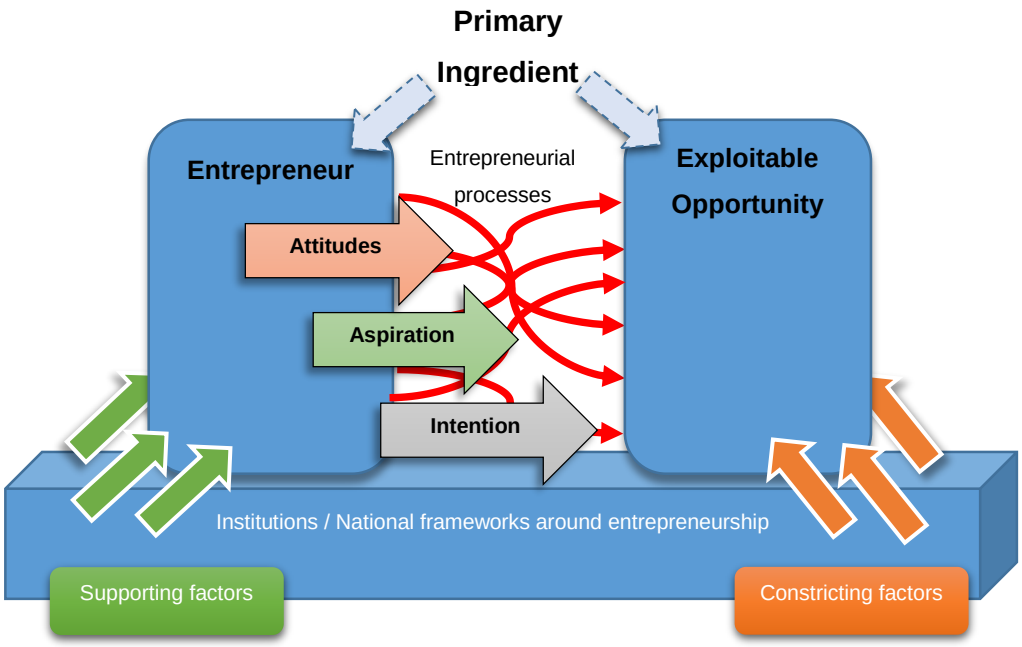
Thus the driving forces behind the entrepreneur may briefly be summarized as an individual having a certain inclination / attitude towards entrepreneurship, having an aspiration towards exploiting an opportunity and some form of ability or activity towards the entrepreneurial intention (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015). This together with national frameworks would provide the platform for the entrepreneurial process to take place; provided there are opportunities to exploit.

As discussed above in measurement institutions, certain institutions measure entrepreneurship on this level such as the Global Entrepreneurship Index (GEI) study and the Global Entrepreneurship Monitor (GEM) study. The GEI study conducts research by

looking at three key indicators namely; attitudes, abilities and aspirations of entrepreneurs. The Global Entrepreneurship Index study goes further in looking at what institutional factors provide for support or lack of support on a national level (Acs et al., 2015). The Global Entrepreneurship Monitor study looks similarly at attitudes, activities and aspirations. However they do not include institutional indicators in their measurements (Singer et al., 2014a).

Thus it becomes evident that the driving force behind the individual and entrepreneurship is levied on motivating factors such as the entrepreneurial attitudes, aspirations and intentions. However this is predicated on the foundation of national / institutional regulations that either support or constrict the individual as well as opportunities the individual may perceive. This is shown diagrammatically in figure 4 below.

Figure 4: Basic construct of the individual entrepreneur



Source: Geitlinger, S (2015)

2.7 Chapter Summery

Given the entrepreneurship theory and drivers of entrepreneurship it becomes clear that entrepreneurship is an important academic field of study (Acs, 2010; Brouwer, 2002; Marcoux, 2012; Wennekers & Thurik, 1999). The three differing views from Joseph Alois Schumpeter (1883 – 1950), Frank Hyneman Knight (1885 – 1972) and Israel Kirzner (1930 -) provide alternatives but not conclusions to the idea of entrepreneurship theory.

Linking entrepreneurship to economic growth through the Wennekers and Turik (1999) model, we note that the entrepreneur is not void of institutional influences nor free from influences of the macro economy (UNCTADstat, 2013; Wennekers & Thurik, 1999). Understanding that with strengthening institutions, more entrepreneurial activity is shifted towards productive entrepreneurship, strengthening economies (Acs et al., 2014; Acs, 2010) . The relationship between entrepreneurship and economic development is found to be S-shaped curve (Acs, 2010). Moving economies from factor driven into efficiency driven and ultimately to innovation driven is shown to be a positive progression for economic wealth and stability.

To understand what the drivers or the forces that are involved in moving an economy from a factor driven to an efficiency driven and then innovation driven through the lens of entrepreneurship, one needs to be able to measure entrepreneurship and the forces / factors at play (Acs et al., 2014; Marcotte, 2013). Organisations such as The Global Entrepreneurship Monitor (GEM) study (Singer et al., 2014a), The Global Entrepreneurship Index (GEI) study (Acs et al., 2015), World Bank Entrepreneurship Survey (Marcotte, 2013) and the Organisation for Economic Co-operation and Development (OECD) (Ahmad & Hoffman, 2008) we can begin to understand how to constructively shape economic policies and provide platforms for constructive growth.

To the South African context, from understanding how South Africa deals with apartheid and remedying the challenges of exclusion to the rampant unemployment rate and slow economic growth, it is clear that South Africa is faced with unique challenges. Understanding how and why small medium and micro enterprise (SMME) have failed and were not able to transform South Africa's small business sector into a growing sustainable sector of the economy (Berry et al., 2002). Economic growth and employment are amongst the most notable pending issues South Africa faces as noted by president Zuma (National Planning Commission, 2012).

To the individual entrepreneur and understanding how their attitudes, aspirations and abilities affect behaviour as well as how institutional / national frameworks work and how they play an important role when identifying exploitable opportunities is key to understanding entrepreneurs within the South African context (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015).

These factors ultimately all support the entrepreneurial concept from theory and definitions through to drivers of economic development to measurement institution to how it all affects South Africa and the individual entrepreneur.

3. RESEARCH QUESTIONS AND PROPOSITIONS

3.1 Introduction

The research questions and propositions seek to understand the structural components of entrepreneurship. Understanding the structural aspect and being able to measure entrepreneurship in a critical manner is paramount to the formation of new business and growth of the economy. Further, being able to measure entrepreneurship while constructive, careful consideration should be given to how and what is measured and if this measurement reflects the true state of entrepreneurship in South Africa.

3.2 Research Question

3.2.1 Primary question

In what way do the findings and conclusions of the GEM and GEI studies provide a comprehensive view of entrepreneurial activity in South Africa?

3.2.2 Secondary question

What, if any, are the structural gaps in the GEM and GEI frameworks that may hinder a comprehensive view of entrepreneurial activity in South Africa?

3.3 Propositions

3.3.1 Proposition 1

The GEM and GEI studies do not provide a comprehensive view of the actual entrepreneurial abilities, aspirations and attitudes present in South Africa.

3.3.2 Proposition 2

The structure of the GEM and GEI studies results in an incomplete view of South African entrepreneurial activity.

3.4 Chapter Summary

The secondary question will be addressed first as it provides the foundation and support for findings for the primary research question; the framework is the first tool used in measuring entrepreneurship in South Africa and thus needs to be addressed first. Both research questions were integrated into a comprehensive discussion in the findings and conclusion section of this study.

4. RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

The GEM and the GEI reports are currently the largest studies of entrepreneurship in the world (Álvarez et al., 2014). The current study investigates the Global Entrepreneurship Monitor and Global Entrepreneurship Index reports and determines the adequacy and reflective nature of entrepreneurial activity in South Africa. The study is a comparative analysis of both the reports.

The research methodology and design chapter was used to answer and provide details on the primary and secondary questions together with the propositions of the previous chapter. This section provides the thinking and rationale behind the chosen methodology and why the methodology supports the current study.

4.1.1 Elements of the Methodology section

The research methodology section is comprised of the following sections:

1. Research design
2. Nature of the study
3. Universe / population
4. Measurement
5. Data collection
6. Research methodology limitations

The theory relating to each section will be discussed in brief with arguments made for the use of chosen aspects of each theory.

4.2 Research design

The choice in research design is to orientate and operationalise this study into a logical, systematic and meaningful manner. To do this concisely, careful consideration of the various methods was undertaken. Various research designs were available namely; quantitative design, qualitative design and mixed methods design.

Qualitative research design is associated with an interpretive philosophy where researchers are required to interpret and make sense of information (Saunders, Lewis, & Thornhill, 2012). The subjectivity and socially constructed meanings and expressions are the core items under discussion of the study. The research orientation is of an inductive approach where the researcher develops richer theories and perspectives than those which exist currently. The characteristics are via constructed frameworks and data collection is non-standardised and where process and procedure vary and eventually emerge (Kothari, 2004; Saunders et al., 2012).

This study undertook a qualitative research approach through the use of semi-structured interviews with industry experts in various fields. The researcher wished to obtain a deeper understanding of entrepreneurship though different sectors of the economy and thus selected industry experts in as many fields as possible. The interviews were partly guided through the use of the research questions and propositions. The interviewee/s were given the opportunity to talk freely about their thoughts on entrepreneurship. The data was collected and analysed through the use of thematic analysis.

Additionally a comparative element was introduced to the study. The qualitative aspects of the study were thought to be limited and additional elements were required to enhance the data and study. The GEM and GEI framework and methodology were also investigated in a comparative manner to assist in exploring and adding quality to the study. The comparative study thus becomes the foundation of the entire study and lends support and credibility to the study.

4.3 Nature of the study

The three major methodologies / nature of studies (Kothari, 2004; Saunders et al., 2012) are exploratory studies, descriptive studies and explanatory studies. Exploratory research technique is generally used for research investigations that are new, unclear or not clearly defined; it is used to ask open ended questions and to discover insights into a related topic of interest. A number of techniques may be deployed when conducting exploratory research namely; searching through literature, interviewing experts, conducting in depth interviews or conducting focus groups (Saunders et al., 2012). Due to the exploratory nature of this study the interviews / focus groups are generally unstructured.

Descriptive research technique is aimed at accurately describing characteristics of an investigation or study. This study gains an accurate profile of events and / or situations in a precise manner.

Explanatory research is aimed at identifying causal relationships, or cause and effect relationships between variables. The study of a situation or relationship in order to explain the relationship between the variables.

These methodologies may be used individually or in combination. This study made use of an exploratory study through interviewing of experts in the field of entrepreneurship. A descriptive study was used to gain insight into the GEM and GEI frameworks. This provided a platform from which to understand the qualitative aspects of the study namely the interviews.

The interviews were orientated through the use of the research questions and propositions. However the direction was left open to change and was flexible which allowed insights to be discussed. The study also incorporated descriptive aspects in the analysis of data from the Global Entrepreneurship Monitor and Global Entrepreneurship Index reports.

4.4 Universe / population

Entrepreneurship in South Africa was the main focus of this study. More specifically a comparative study between the Global Entrepreneurship Monitor and the Global Entrepreneurship Index specifically on South Africa.

The analysis of the information was enhanced to include the qualitative portion being limited semi-structured interviews with specialists / experts in the entrepreneurial field of study and a comprehensive comparison / comparative discussion. The study focused on entrepreneurship within the South African context only. Industry experts were selected from various industries and sectors of the economy to ensure an adequately representative sample.

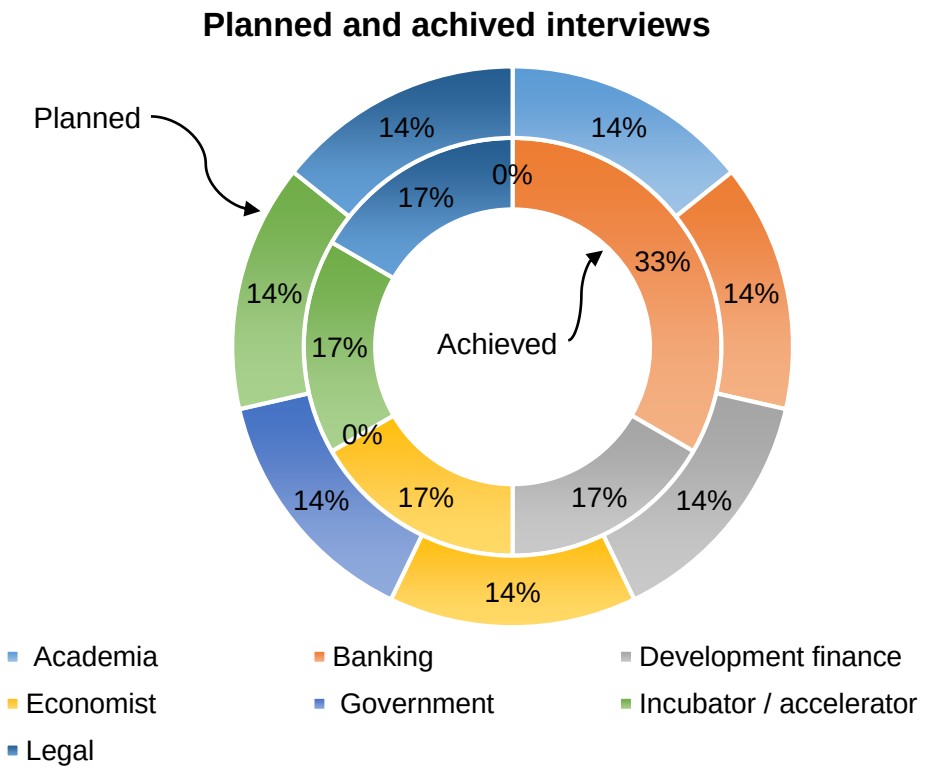
Deliberate or purposive (non-probability) sampling method was chosen. This sampling method involves purposive or deliberate selection of particular units of the universe for constituting a sample which represents the universe, in this case industry experts in specific

fields. Industry experts in the field of entrepreneurship were selected from the following industries, which were seen to be a representative sample:

- Academia
- Banking
- Development finance
- Economist
- Government
- Incubator / accelerator
- Legal

Some sectors were not covered as avalibility of intervewees was limited. Figure 5 below shows intended interviewees and achived interviewees as a percentage.

Figure 5: Planned and achieved interviews per sector



Source: Geitlinger (2015)

4.5 Measurement

The GEM and GEI reports were chosen as they represent the most widely used and accessible reports globally (Marcotte, 2013), and as such the use of convenience sampling was undertaken.

The use of qualitative analysis techniques were deployed on the data collected from the interviews with industry experts. The interviews were recorded and later transcribed. The transcribed interviews were then coded based on emerging themes.

The comparative study was undertaken and based on the intentional construct of the authors of the studies. The nature of the studies were predicated on the following themes:

4.5.1 Global Entrepreneurship Index study

The Global Entrepreneurship Index study is based on 3 key principles namely: Attitudes, Abilities, Aspirations detailed as follows:

Attitudes – Encompass entrepreneurial opportunity perception, start-up skills, risk acceptance, networking capabilities and cultural support from the community.

Abilities – Encompass entrepreneurial opportunity for start-up, ability to absorbed technology advancements, productive and educated human capital / employees and adequate competition in the marketplace.

Aspirations – Encompass entrepreneurial ability for product innovation, ability for process innovation, capacity for high growth, reference to internationalisation and adequate risk capital.

4.5.2 Global Entrepreneurship Monitor Study

The Global Entrepreneurship Monitor framework is based on: Attitudes, Activities and Aspirations and may be described as follows:

Attitudes – Encompass entrepreneurial perception of opportunities and capabilities, the fear surrounding failure of entrepreneurs and the current status of entrepreneurship in given ecosystems.

Activities – Encompass entrepreneurial opportunity / necessity driven ventures, including early stage entrepreneurship, inclusiveness of populations (gender, age) and identification of reasons of business / industry exists.

Aspirations – Encompass entrepreneurial growth, innovation, internationalisation orientation and the creation of social value.

The linking of the GEM and GEI studies was done on this level and analysed for comparative similarity or disparity which was discussed in detail. Theory in the literature review section supports analysis at this level (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015). Thematic analysis was also done on the transcribed interviews and combined with the comparative study. This provided for a rich outcome to the study.

4.6 Data collection

To meet the objectives set out in the research question and propositions, data was required and needed to be collected from a data source/s. There were two basic sources of data collection, being primary and secondary data collection.

4.6.1 Primary data

Primary data is data collected for the specific use or intention of project with specific purpose. Primary data / qualitative data collection, in this case, was obtained with limited unstructured interviews with experts in the entrepreneurial field of study. A list of questions is presented in appendix 3 below.

4.6.2 Secondary data

Secondary data is data that has already been collected for other purposes and includes published summaries and / or raw data. Once secondary data is obtained it can be further analysed to provide different, additional or interpretive conclusions. There are three main type of secondary data; documentary, survey and multiple source.

Secondary data collection, in this case, was collected from the Global Entrepreneurship Monitor and Global Entrepreneurship Index reports from 2010 – 2014. The Global Entrepreneurship Monitor and Global Entrepreneurship Index reports were available online and had no restrictions to access listed.

Primary qualitative data provided the main data set with secondary data supplementing and reinforcing the results. Data was collected from reports available to the general public and the source of data is available in the annexures. The data was collated into a concise tabular format and is presented in appendix 1 and appendix 2 below.

4.7 Research methodology limitations

The methodology was limited in the following manner:

1. The research was limited to the South African context,
2. Secondary research was limited to the Global Entrepreneurship Monitor and Global Entrepreneurship Index reports 2010 – 2014,
3. Primary research was limited to interviews with experts in the entrepreneurial field of study, certain interviews were not obtained and thus certain bias may be present,
4. There were a limited number of reports used in this field (2010- 2014) of study therefore certain biases and limitations may be present,
5. The number of interviewees / experts were limited and may therefore result in a bias and or limitation from opinions,
6. The experts in the field of study may also render some form of bias towards the study should they side with one of the reports,
7. The risk associated with the use the nature of this study and methodology used may have resulted in a dilution of the data and findings.

4.8 Chapter Summary

In conclusion, the study undertaken is a comparative study that incorporates exploratory and descriptive tools. The use of interviews as well as analysis of the respective studies is used to provide a robust analysis. The population was restricted to the South African environment and limited to the Global Entrepreneurship Monitor and Global Entrepreneurship Index reports. The study incorporates both primary and secondary data sources for the interview and reports aspects respectfully.

5. RESULTS

5.1 Introduction

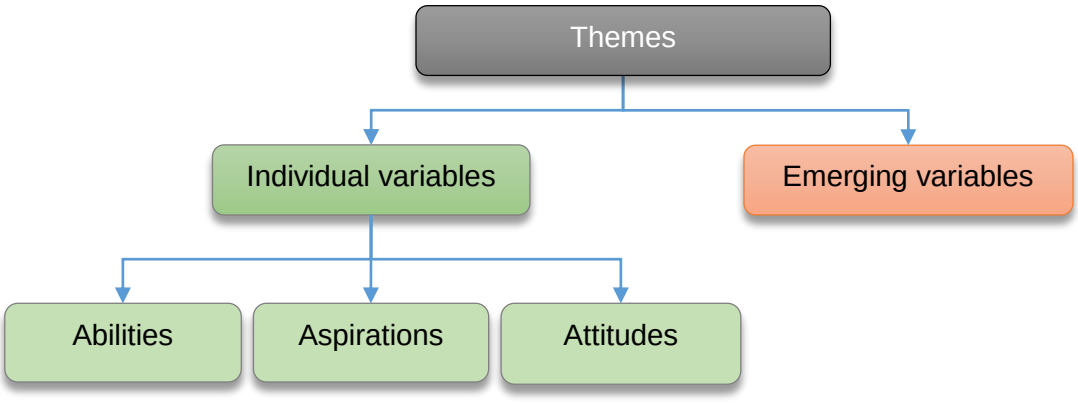
Chapter three presented the research questions and proposed propositions for this study. This chapter will present results of the inquiry / research questions and propositions in two formats namely;

- Results of the comparative study of frameworks used by the GEM and GEI and
- Thematic analysis of interviews combined with GEM and GEI results and findings on entrepreneurship.

The comparative framework study was based on literature in chapter two and used the academic frameworks that were discussed in chapter four around abilities, aspirations and attitudes. The frameworks are discussed in detail in support of the study in totality and provide for a base from which thematic analysis is done. The results from comparative study are required to be discussed first (research question 2) as this provides the base for the discussion around interviews (research question 1).

Interviews were conducted with several entrepreneurship experts, each in varying industries as discussed in chapter four above. The interviews were conducted based on a semi-structured format and interviewees were encouraged to elaborate further. Thematic analysis was completed on the transcribed interviews and the results are presented below. The interviews were coded using the following major themes shown in figure 6 below:

Figure 6: Thematic themes used



Source: Geitlinger (2015)

5.2 Comparative study - presentation of GEM and GEI frameworks

5.2.1 What are the GEM and GEI studies

The Global Entrepreneurship and Development Institute (GEDI) is a non-profit organisation that provides research on entrepreneurship and links entrepreneurship and economic development (Acs et al., 2015). GEDI produces several reports, such as the Global Entrepreneurship Index (GEI), The Female Entrepreneurship Index, Santander Enterprise Index and Region Index (European regions). The GEI measures the quality and dynamics of entrepreneurship ecosystems at a national and regional level (Acs et al., 2015).

The Global Entrepreneurship Monitor study (Singer, Amorós, & Moska, 2014b) monitors entrepreneurial attitudes, perceptions, characteristic and activities both on an individual and on a global scale. Most importantly it measures the changes in these criteria over time which can be thought of as a pipeline of various stages of entrepreneurship. The GEM study produces reports such as the GEM South African report 2013 (Herrington & Kew, 2013).

The GEM and GEI studies divide economies based on Porter's 3 stages of economic development model depicted in figure 2 above namely; factor driven economies, efficiency driven economies and innovation driven economies (Acs et al., 2015; Singer et al., 2014b)

The GEI categorises countries into groups by geographic regions such as Asia-Pacific, Europe, Middle East and North Africa, North America, South/Central America and Caribbean and Sub-Saharan Africa (Acs et al., 2015). They focus on ecosystems in 129 countries and analyse 34 individual and institutional variables and rank them according to their performance relative to one another. Their focus is on a mix of abilities, attitudes and aspirations supported by 14 pillars of entrepreneurship (Acs et al., 2015).

The GEI is an index that ranks countries in a numeric format that measures the entrepreneurial performance of a particular country and if that country is performing better or worse relative to others in their geographic location and or economic stage. Table 3 below displays the 2015 most entrepreneurial countries in the world and their movement from 2014 to 2015.

Table 3: The ten most entrepreneurial countries in 2015

Country	GEI 2015	Rank 2015	GEI 2014	Rank 2014
United States	85.0	1	82.0	1
Canada	81.5	2	n.a.	n.a.
Australia	77.6	3	76.8	3
United Kingdom	72.7	4	69.9	5
Sweden	71.8	5	73.7	4
Denmark	71.4	6	78.2	2
Iceland	70.4	7	68.0	11
Taiwan	69.1	8	69.6	7
Switzerland	68.6	9	69.4	8
Singapore	68.1	10	66.4	14

Source: Global Entrepreneurship Index 2015

The GEM study tracks entrepreneurial attitudes, activity and aspirations (Singer et al., 2014, p. 11) in a localised but national context. It provides for comparisons between different levels of entrepreneurship activity in different regions and different economic levels and conditions. It identifies factors that promote or discourage entrepreneurial activity and assists where possible in, through providing targeted information, the formulation of policies and programs to support economic development (Herrington & Kew, 2013).

The GEM is a study that gathers, analyses and reports on primary data for the study of entrepreneurship in a systematic and uniform manner on a global scale (Global Entrepreneurship Research Association, 2015). The GEM study was first published in 1999 by two academics Michael Hay and Bill Bygrave from Babson College (USA) and London Business School (UK) which covered just 10 countries. The 2014 GEM study today, 16 years later, covers 100 countries in many geographic regions.

The GEM survey covers 90% of the world's Gross Domestic Product (GDP) and 70% - 75% of the world's population. The GEM study looks at entrepreneurial behaviour, attitudes, attributes, aspirations and intentions of individuals in a national context. The GEM study focuses on the individual entrepreneur as most businesses begin with a single person. The GEM report is currently the largest study on entrepreneurship in the world (Álvarez et al., 2014).

5.2.2 GEM and GEI methodology and framework

The GEM study uses two tools for collecting data from individuals and institutions. It uses an Adult Population Survey (APS) and a National Expert Survey (NES). The APS looks at entrepreneurial attributes, attitudes and activities of individuals while the NES looks at experts in the field relating to institution support of entrepreneurship.

The GEM uses a population of 2,000 minimum randomly selected adults (+18 years of age) and conducts the research through independent research companies throughout the globe during April to June period. The information is collected through fixed line telephone interviews, mobile telephone interviews, face-to-face interviews or a combination.

The GEM conducts surveys around the world with a methodology enabling comparisons on both a country level and among countries. All countries participating in the survey use the same standardized surveying tool and procedures.

The GEI framework is based on two key variables namely individual data and institutional / environmental variables. All individual level data is obtained from the GEM survey. The institutional data is obtained from a collection of various sources. Both the individual (14 categories) and institutional / environmental data (14 categories) is categorised in to sets making up 14 pillars. These 14 pillars are further simplified into 3 sub-index categories. The size and sample for each country varies depending on data available.

The GEM and the GEI studies evaluate a number of countries in both developed and developing economies. Table 4 below depicts a comparable list detailing the GEI study comprising 129 countries in 2015 and GEM comprising 69 countries in 2014.

Table 4: Country study table - GEM and GEI

#	GEI 2015	GEM 2014
1	Albania	
2	Algeria	
3	Angola	
4	Argentina	Argentina
5	Australia	Australia
6	Austria	Austria
7	Bahrain	
8	Bangladesh	
9	Barbados	Barbados
10	Belgium	Belgium
11		Belize
12	Benin	
13		Bosnia-Herzegovina
14	Bolivia	Bolivia
15	Botswana	Botswana
16	Brazil	Brazil
17	Brunei	
18	Bulgaria	
19	Burkina Faso	Burkina Faso
20	Burundi	
21	Cambodia	
22	Cameroon	Cameroon
23	Canada	Canada
24	Chad	
25	Chile	Chile
26	China	China
27	Colombia	Colombia
28	Costa Rica	Costa Rica
29	Côte d'Ivoire	
30	Croatia	Croatia
31	Cyprus	
32	Czech Republic	
33	Darussalam	
34	Denmark	Denmark
35	Dominican Republic	
36	Ecuador	Ecuador
37	Egypt	
38	El Salvador	El Salvador

#	GEI 2015	GEM 2014
39	Estonia	Estonia
40	Ethiopia	
41	Finland	Finland
42	France	France
43	Gabon	
44	Gambia	
45		Georgia
46	Germany	Germany
47	Ghana	
48	Greece	Greece
49	Guatemala	Guatemala
50	Guyana	
51	Honduras	
52	Hong Kong	
53	Hungary	Hungary
54	Iceland	
55	India	India
56	Indonesia	Indonesia
57	Iran	Iran
58	Ireland	Ireland
59	Israel	
60	Italy	Italy
61	Jamaica	Jamaica
62	Japan	Japan
63	Kazakhstan	Kazakhstan
64	Kenya	
65	Korea	
66	Kuwait	Kuwait
67	Lao PDR	
68	Latvia	
69	Lebanon	
70	Liberia	
71	Libya	
72	Lithuania	Lithuania
73	Luxembourg	Luxembourg
74	Macedonia	
75	Madagascar	
76	Malawi	

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#	GEI 2015	GEM 2014
77	Malaysia	Malaysia
78	Mali	
79	Mauritania	
80	Mexico	Mexico
81	Moldova	
82	Montenegro	
83	Morocco	
84	Mozambique	
85	Myanmar	
86	Namibia	
87	Netherlands	Netherlands
88	Nicaragua	
89	Nigeria	
90	Norway	Norway
91	Oman	
92	Pakistan	
93	Panama	Panama
94	Paraguay	
95	Peru	Peru
96	Philippines	Philippines
97	Poland	Poland
98	Portugal	Portugal
99	Puerto Rico	Puerto Rico
100	Qatar	Qatar
101	Romania	Romania
102	Russia	Russia
103	Rwanda	
104	Saudi Arabia	
105	Senegal	
106	Serbia	
107	Sierra Leone	
108	Singapore	Singapore
109	Slovakia	Slovakia
110	Slovenia	Slovenia
111	South Africa	South Africa
112	Spain	Spain
113	Sri Lanka	
114	Suriname	Suriname
115	Swaziland	
116	Sweden	Sweden
117	Switzerland	Switzerland
118	Taiwan	Taiwan
119	Tanzania	
120	Thailand	Thailand
121	Trinidad & Tobago	Trinidad & Tobago
122	Tunisia	
123	Turkey	
124	Uganda	Uganda
125	Ukraine Jordan	
126	United Arab Emirates	
127	United Kingdom	United Kingdom
128	United States	United States
129	Uruguay	Uruguay
130	Venezuela	
131	Vietnam	Vietnam
132	Zambia	
Total	**129**	**69**

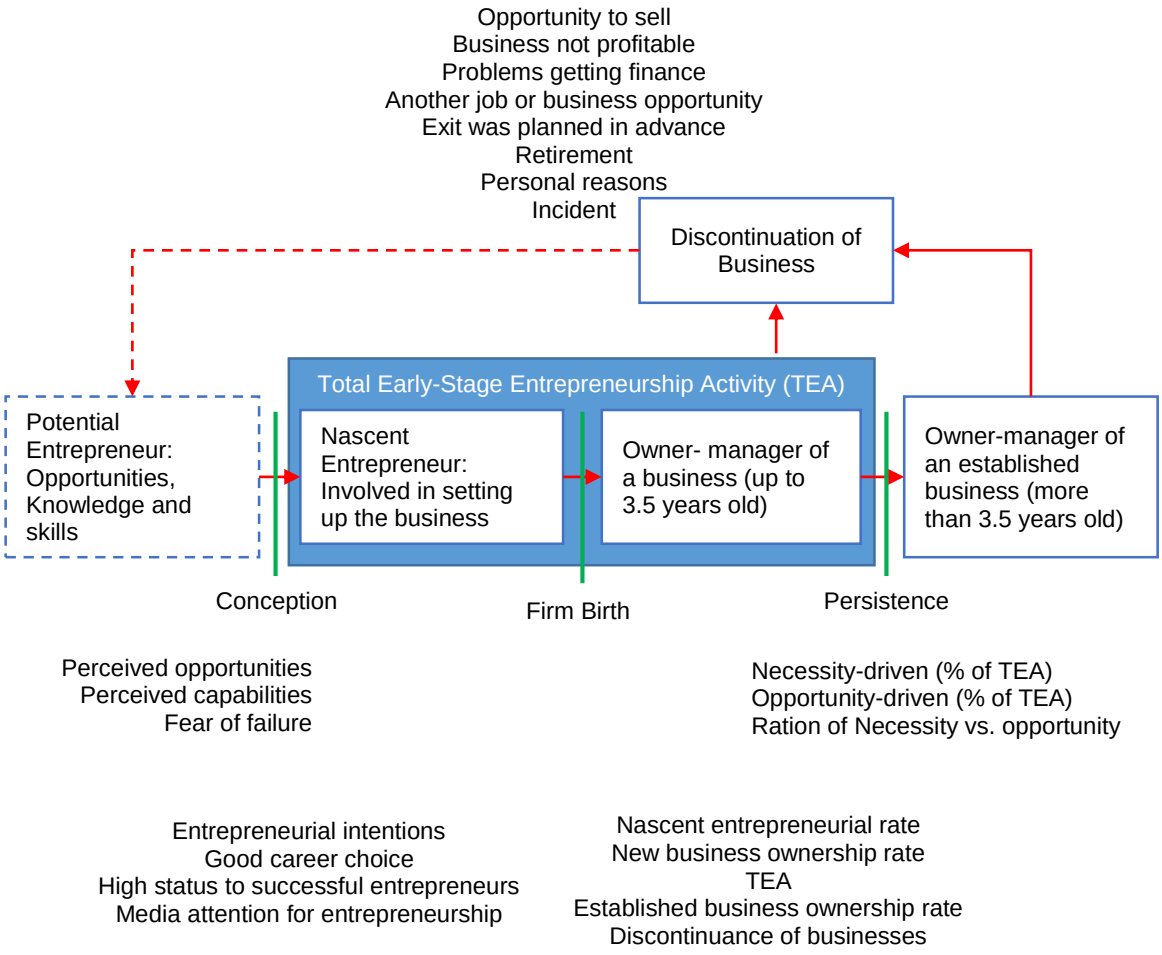
Source: Adapted from the Global Entrepreneurship Monitor study (2014) and Global Entrepreneurship Index study (2015)

5.2.2.1 The Global Entrepreneurship Monitor

The Global Entrepreneurship Monitor focuses on a number of key social values (attributes) through three dimensions; entrepreneurship as a good career choice, high status to successful entrepreneurship and media attention for entrepreneurship. It focuses on geographic regions and percentage of population of individuals (attitudes) by dividing them into categories such as individuals that perceive opportunities, perceive capabilities, and have fear of failure and entrepreneurial intentions. While entrepreneurial activities (activity) are divided into nascent entrepreneurship, new business ownership, early stage entrepreneurship activity (TEA), established business ownership and discontinuation of business (Herrington & Kew, 2013; Marcotte, 2013).

The Global Entrepreneurship Monitor looks at various categories namely; Potential entrepreneurs, Intentional entrepreneurs, Nascent entrepreneurs, New entrepreneurs, Established business owners and Discontinued entrepreneurs. The GEM obtains information and scores each of these categories through an Adult Population Survey (APS) and a National Experts Survey (NES). This is diagrammatically shown in figure 7 below.

Figure 7: The GEM entrepreneurial process including measurement categories



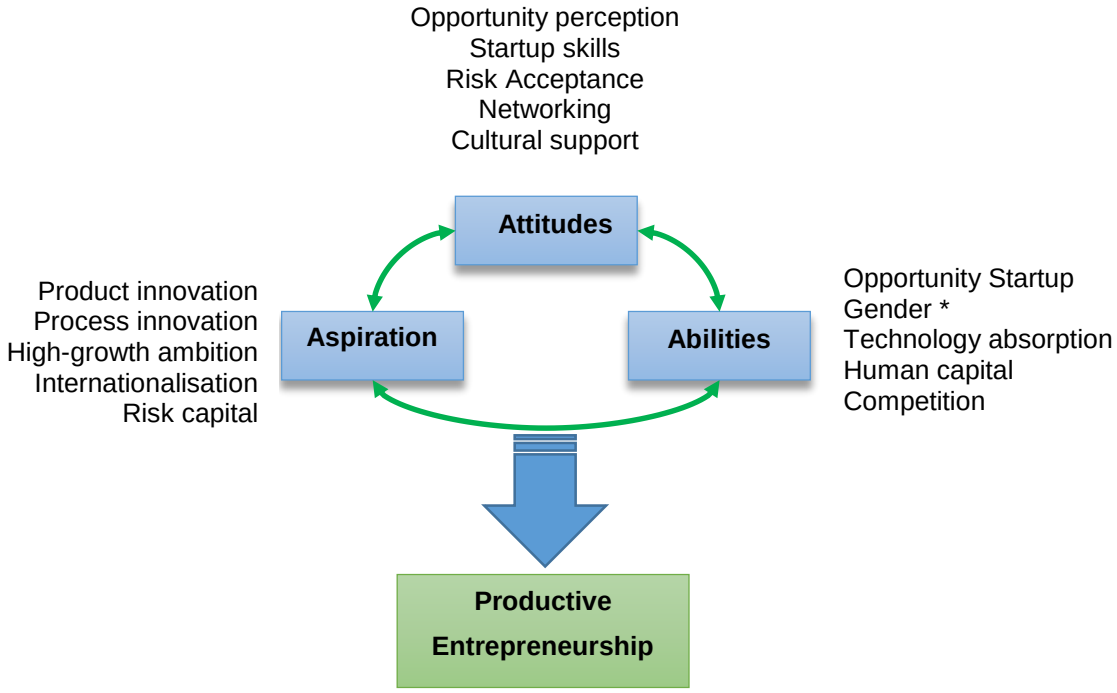
Source: Adapted from the Global Entrepreneurship Monitor Report 2014 (Herrington, Kew, & Kew, 2014)

5.2.2.2 The Global Entrepreneurship Index

The Global Entrepreneurship Index study structures its index on three main building blocks namely entrepreneurial Attitudes, Abilities and Aspirations.

The GEI subdivides each of these building blocks further into 15 pillars (14 from 2015) which assists in measuring and quantifying each category. Gender has been included in GEI data up until 2014 and removed for the 2015 study onward. These pillars are representative and show in figure 8 below.

Figure 8: Dynamic of National Systems of Entrepreneurship



Source: Adapted from the Global Entrepreneurship Index 2015 (Autio et al., 2015)

The GEI divided the 14 pillars further into two specific components, individual variables and institutional variables. The structure is shown in table 5 below (Acs et al., 2015).

Table 5: Structure of the Global Entrepreneurship Index

Attitudes Sub-Index	Opportunity Perception	Market Agglomeration
		Opportunity
	Start-up Skills	Post-Sec Education
		Skill Recognition
	Risk Acceptance	Business Risk
		Risk Perception
	Networking	Internet Usage
		Know Entrepreneur
	Cultural Support	Corruption
		Career Status
Abilities Sub-Index	Opportunity Start-up	Freedom
		Tea Opportunity
	Technology Absorption	Tech Absorption
		Tech Sector
	Gender	Female Opportunity
		Tea Femalr
	Human Capital	Staff Training
		High Education
	Competition	Market Dominance
		Competition
Aspirations Sub-Index	Product Innovation	Tech Transfer
		New Product
	Process Innovation	Gerd
		New Technology
	High Growth	Business Strategy
		Gazelle
	Internationalization	Globalization
		Export
	Risk Capital	Depth Of Capital Market
		Informal Investment

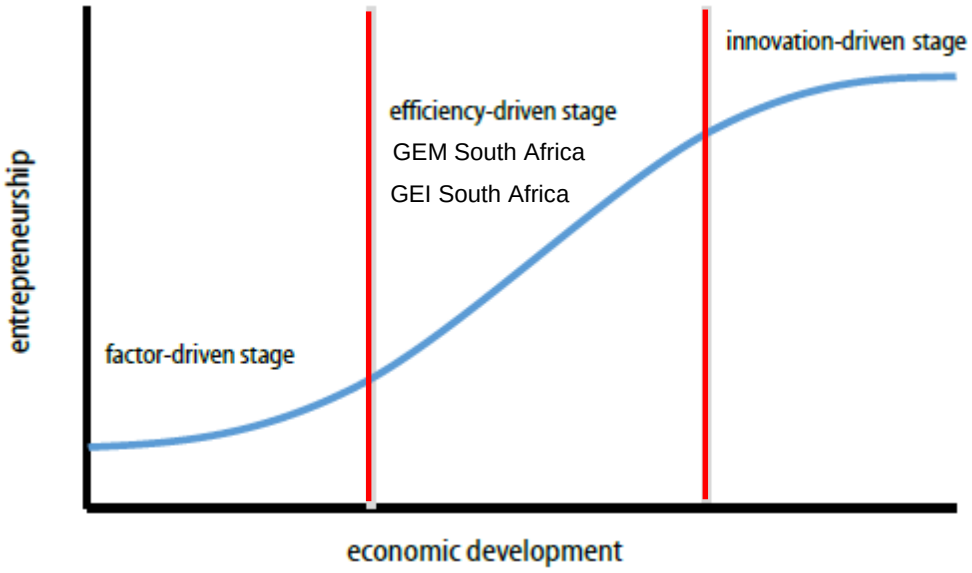
Source: The Global Entrepreneurship Index 2015 (Autio et al., 2015)

The GEI measures / scores each country based on a scoring mechanism from the individual and institutional variables which are then collated upward until one score is derived for each country. This score is then ranked relative to the geographic area and globally.

5.2.2.3 Geographic and stage of economic development – GEM and GEI

The GEM and GEI both measure entrepreneurship using Porter's 3 stage economic development model shown in figure 9 below. The S-shaped curve divides all economies into 3 basic categories namely factor driven stage, efficiency driven stage and innovation driven stage. All countries (economies) can be listed in one of these stages. The GEM follows the World Economic Forum typology of countries definition developmental level as a tool or method for placement of a country (economy) while the GEI calculates a countries score based on their own numerical formula and places a country (economy) into a stage.

Figure 9: The relationship between entrepreneurship and economic development (Acs, 2010)



Source: Adapted from the Global Entrepreneurship Monitor study (2014) and Global Entrepreneurship Index study (2015)

The GEM focuses on Africa, Asia and Oceania, Latin America and Caribbean, European Union , Non European Union and North America while GEI focuses on Asia-Pacific, Europe, Middle East and North Africa (MENA), North America, South / Central America and Caribbean and Sub-Saharan Africa. These countries are listed in table 6 below.

Table 6: GEM and GEI economic location classifications

Global Entrepreneurship Index	Global Entrepreneurship Monitor
Area	**Area**
Asia-Pacific	Asia & Oceania
Europe	European Union
	Non-European Union
Middle East and North Africa (MENA)	Africa
Sub-Saharan Africa	
North America	North America
South / Central America and Caribbean	Latin America & Caribbean

Source: Adapted from the Global Entrepreneurship Monitor study (2014) and Global Entrepreneurship Index study (2015)

The Global Entrepreneruship Monitor divides economies into geographic areas as shown in table 7 below as well as state of economic development. GEM notes any transitions likely to occure in the short term.

Table 7: GEM economies by location and economic development level, 2014

	Factor-driven Economies	Efficiency-driven Economies	Innovation-driven Economies
Africa	Angola[1], Botswana[1], Burkina, Faso, Cameroon, Uganda	**South Africa**	
Asia & Oceania	India, Iran[1], Kuwait[1], Philippines[1], Vietnam	China, Indonesia, Kazakhstan[2], Malaysia[2], Thailand	Australia, Japan, Singapore, Taiwan, Qatar
Latin America & Caribbean	Bolivia[1]	Argentina[2], Barbados[2], Belize, Brazil[2], Chile[2], Colombia, Costa Rica[2], Ecuador, El Salvador, Guatemala, Jamaica, Mexico[2], Panama[2], Peru, Suriname[2], Uruguay[2]	Puerto Rico, Trinidad and Tobago
European Union		Croatia2, Hungary2, Lithuania2, Poland2, Romania	Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Slovenia, Slovakia, Spain, Sweden, United Kingdom
Non-European Union		Bosnia and Herzegovina, Georgia, Kosovo, Russian Federation[2], Turkey[2]	Norway, Switzerland
North America			Canada, United States

1. In transition to efficiency-driven economies
2. In transition to innovation-driven economies

Source: 2014 GEM South Africa Report (Herrington et al., 2014)

The Global Entrepreneurship Index uses a different methodology in classification of geographic region. This can be seen in table 8 below.

Table 8: Global Entrepreneurship Index country groups

Area	Country / region
Asia-Pacific	Australia, Bangladesh, Brunei, Darussalam, Cambodia, China, Hong Kong, India, Indonesia, Japan, Kazakhstan, Korea, Lao PDR, Malaysia, Myanmar, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Vietnam
Europe	Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom
Middle East and North Africa (MENA)	Algeria, Bahrain, Egypt, Iran, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates
North America	Canada, Mexico, United States
South / Central America and Caribbean	Argentina, Barbados, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, Trinidad & Tobago, Uruguay, Venezuela
Sub-Saharan Africa	Angola, Benin, Botswana, Burkina Faso Burundi, Burundi, Cameroon, Chad, Côte d'Ivoire, Ethiopia, Gabon, Gambia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Sierra Leone, **South Africa**, Swaziland, Tanzania, Uganda, Zambia

Source: Adapted from Global Entrepreneurship Index Report 2015 (Acs et al., 2015)

The Global Entrepreneurship Monitor and Global Entrepreneurship Index do not categorise area or region using the same methodology. Both the Global Entrepreneurship Monitor and Global Entrepreneurship Index generate country specific reports, specifically on South Africa. The Global Entrepreneurship Monitor categorises South Africa as the only efficiency driven economy and the only African country to rank outside of factor driven economies. The Global Entrepreneurship Index ranks South Africa as the leading country in Sub-Saharan Africa; placing it in the top 50% of countries measured.

5.3 Thematic analysis of results and contrasting the GEM and GEI data

The Global Entrepreneurship Index study as well as the Global Entrepreneurship Monitor study produces key indicators / results for South Africa on both an individual level as well as an institutional level. These indicators are divided into sub indicators as shown in the table below:

Table 9: GEI and GEM indicator table

Global Entrepreneurship Index	Global Entrepreneurship Monitor
Attitudes	Attitudes
Abilities	Activities
Aspirations	Aspirations

Source: Global Entrepreneurship Index (2014) and Global Entrepreneurship Monitor (2014)

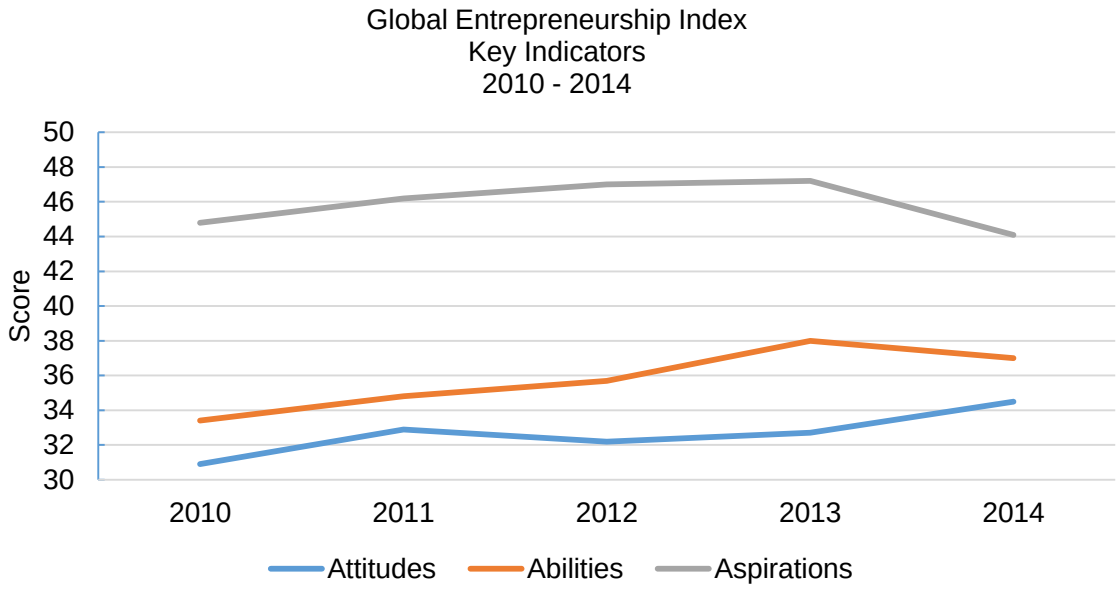
These indicators are quantified and the data is collected over time. The general trend of these results may be indicative of progression or decline over time. This may provide a comparative view of both studies as these are key measures or ingredients on entrepreneurship as discussed in chapter two (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015). The results and trends of the GEM and GEI will be discussed in each category together with thematic analysis of interviews. A number of quotes from each interviewee / expert is presented in a table format.

Each interviewee was allocated a code which represents the sector in which they are specialised as follows: DVF – Development finance, FIN – Financial, LEG – Legal, ECO – Economics sector, FIN2 – Financial, INC – Incubator.

5.3.1 Presentation of GEM and GEI key indicators

The Global Entrepreneurship Index findings on attitudes, abilities and aspirations are shown in the figure 10 below. These measures are focused on in more detail in chapter 6. Clear trends are visible for all the key indicators.

Figure 10: Global Entrepreneurship Index – South Africa key indicators over time



Source: Adapted from Global Entrepreneurship Index (2010 – 2014)

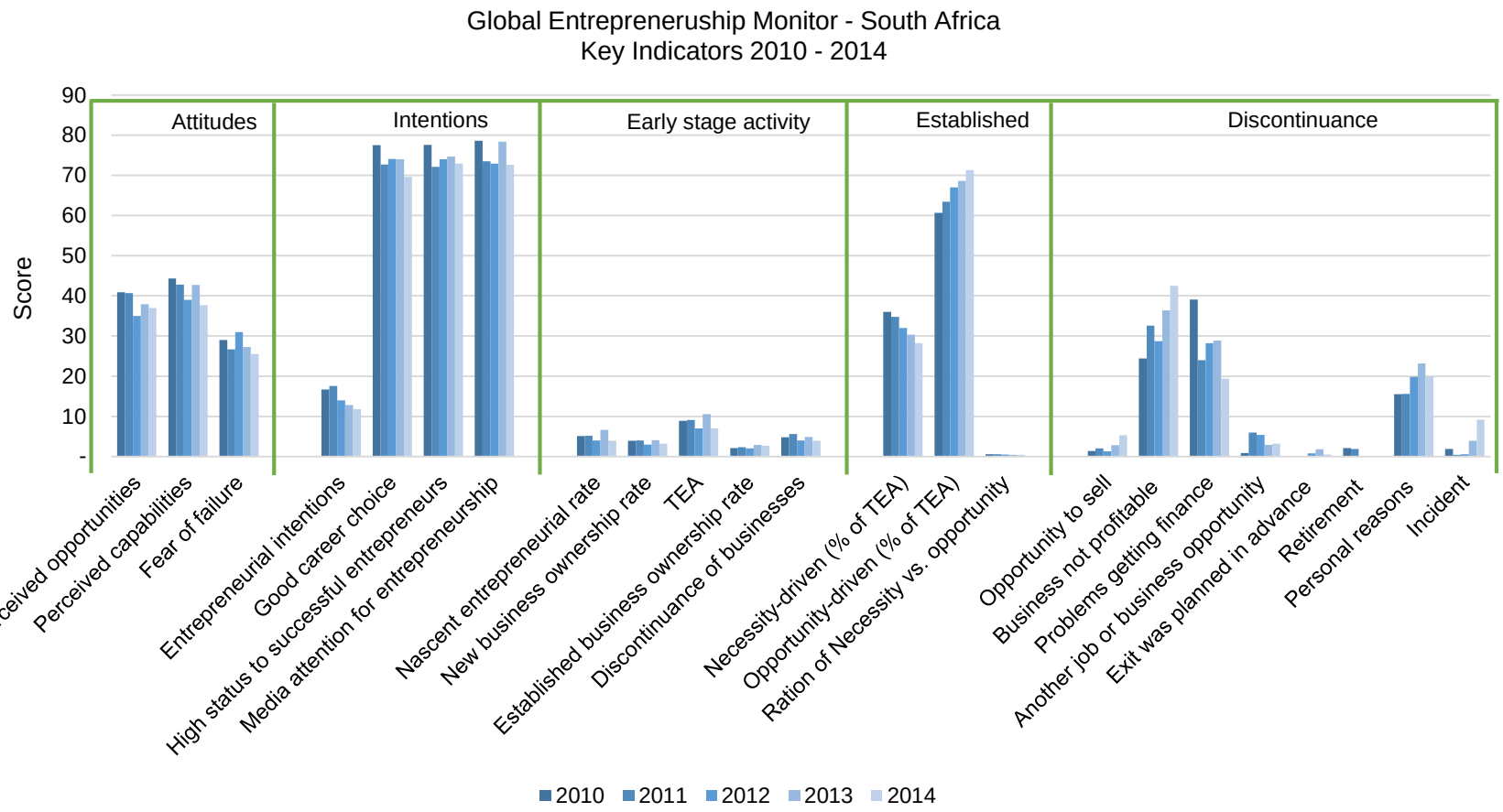
The Global Entrepreneurship Monitor study produces five basic categories of information for South Africa which are displayed in the pipeline framework in figure 8 above. The general trend of these indicators are shown in the figure 11 below.

The categories are:

- Attitudes and potential entrepreneurs *
- Entrepreneurial intentions *
- Early-stage entrepreneurial activity *
- Established businesses
- Business discontinuance

As established business and business discontinuation were not discussed in the GEI framework, these two categories were not the focus of this study.

Figure 11: Global Entrepreneurship Monitor South African key indicators over time 2010 – 2014

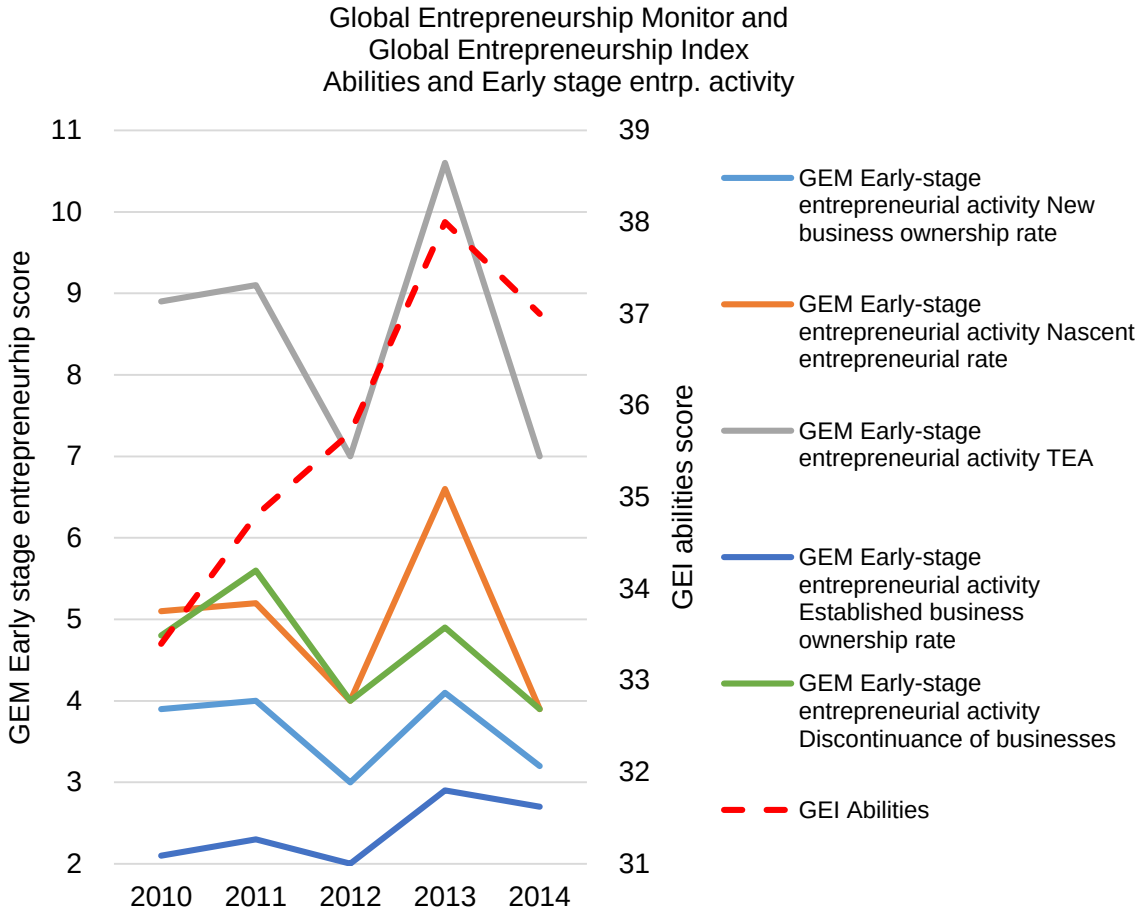


Source: Adapted from Global Entrepreneurship Monitor (2010 – 2014)

5.3.2 GEM and GEI abilities and early stage entrepreneurship activity indicators

The GEM abilities indicators are graphed together with the corresponding GEI indicators and shown in figure 12 below.

Figure 12: Global Entrepreneurship Monitor and Global Entrepreneurship Index Abilities and Early stage entrepreneurship activity 2010 - 2014



Source: Global Entrepreneurship Index and Global Entrepreneurship Monitor (2010 – 2014)

Examples of quotes from the abilities themes and sub-themes were collected from the interviewees and added into the table below. The themes were ranked in the table according to their frequency of occurrence. This demonstrates that the theme had a prominent reoccurrence amongst respondents.

Table 10: Thematic analysis – Themes on abilities

Rank	Theme	DVF	FIN	LEG	ECO	FIN2	INC	TOTAL
1	Required skills	21	14	13	6	15	11	**80**
2	Technology in entrepreneurship	5	10	2	1	1	3	**22**
3	Necessity entrepreneurship	0	8	0	0	3	0	**11**
	TOTAL	**26**	**32**	**15**	**7**	**19**	**14**	**113**

Table 11: Thematic analysis – Quotes on abilities

Rank	Theme	Frequency	Question	Quotes
1	Required skills	80	1	DVF: “In terms of running a business they don’t know how do to do it...” DVF: “I think generally seeking those business skills are lacking…” DVF: “entrepreneurs that have the most amazing network but does not know how to leverage it…” DVF: “their skill is lacking but I must be honest it is one of our biggest struggle is to find these entrepreneurs namely black entrepreneurs…” DVF: “as far as black entrepreneurs are concerned and we really struggle to find black entrepreneurs with a great idea…”

Rank	Theme	Frequency	Question	Quotes
				DVF: “that a lot of the entrepreneurs that I work with are always looking for high quality employees…”
				FIN: “we have the ability to follow a copycat model of the World…” FIN: “The ability to access capital, it is a skill and there is a connectivity piece to it as well...” FIN: “So you can have something that is really great entrepreneurially at a certain level until somebody with that education, connectivity and understanding of setting up companies and doing all the formalities takes them under their wing they have…” FIN: “in the absence of a support system that you might have in other countries…some entrepreneurs have got a glass ceiling…”
				LEG: “has the aspirational ability to want to be an entrepreneur and have the intention to do it as well as the skills set…” LEG: “The major stumbling blocks is education...” LEG: “young entrepreneurs getting into trouble because they cannot comply with the legislative requirements in terms of controlling their administration...”
				FIN2: “unless you building a very heavily labor based business that is based on labor but at the end of the day high quality educated people whatever you doing, whatever they doing to you helps make you successful…”

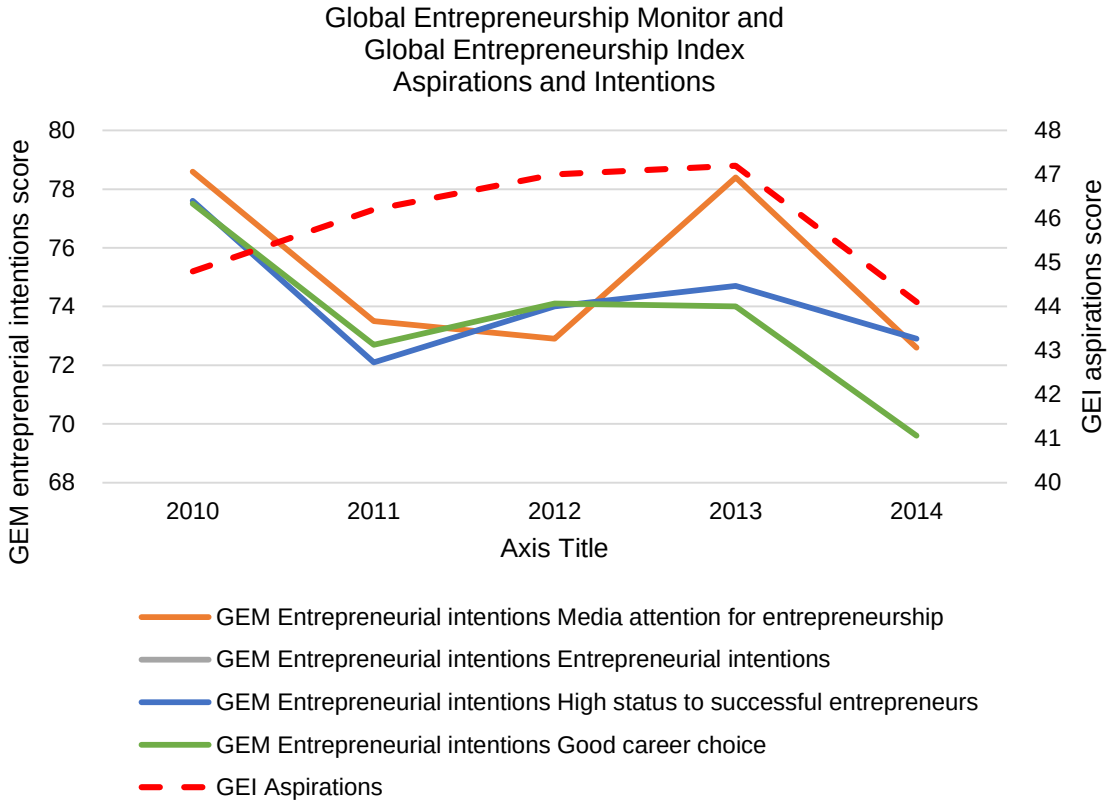
Rank	Theme	Frequency	Question	Quotes
				FIN2: “if you don’t know math and if you don’t know accounting and if you can’t debit and credit something you need to be street smart to be an entrepreneur…” FIN2: ‘That is critical and why I say that because you get entrepreneurs who are not academically strong and you get academically strong people who are not entrepreneur…” FIN2: ‘So it depends on the different stage of entrepreneurship where you are…”
				INC: “I think that generally one of the things that called out as lacking in the ecosystem is high skill, high value added, and high sophistication enterprise…” INC: “I mean look at it this way you can only innovate by blind luck if you don’t really understand what already exists right and so that is where education comes in….” INC: “So I mean SA is playing on the back foot there I mean what the latest rankings like 148 out of a 150 ranked countries in math and science….” INC: “basic quantitative prerequisites and I think the ability to express yourself orally and in written…” INC: “Yes it is unquestionably huge…” INC: “then when you show up you have got to be like halfway credible…”
				ECO: “it ranks very highly, it is partly linked but not entirely so to the shortage of skills and the poor education outcomes…”

Rank	Theme	Frequency	Question	Quotes
				ECO: “the government is not creating an environment that is conducive towards it and is why I say it links in with education…” ECO: “if people can’t count properly then it is difficult for them to make a success as entrepreneurs because they don’t know whether they are making profits or losses or anything let alone you know anything else…” ECO: “it is very difficult to find an appropriate person with the skills required…”
2	Technology in entrepreneurship	22	1	FIN: “we have the ability to follow a copycat model of the world…” FIN: “I think we import a lot of technology...” FIN: “It takes a lot of money so you know a lot of technology grows out of universities and colleges…” FIN: “So you have got the raw technology into the country and then you apply it differently so that is where there is a lot of innovation…”
				DVF: “I think you find that there are a lot of people who are technologically very flabby or don’t understand what it is that they trying to sell...” DVF: “we are definitely on a path if not if some areas exceed our neighbors in terms of the technologies and the innovation of coming out of South Africa...”
3	Necessity entrepreneurship	11	1	FIN: “In most parts of the world people do it because there is no other option...” FIN: “You literally start doing what you need to do to survive…”

5.3.3 GEM and GEI aspirations and intentions indicators

GEM aspirations indicators were graphed together with GEI corresponding indicators as shown in figure 13 below.

Figure 13: Global Entrepreneurship Monitor and Global Entrepreneurship Index Aspirations and Intentions 2010 - 2014



Source: Global Entrepreneurship Index and Global Entrepreneurship Monitor (2010 – 2014)

Examples of quotes from aspirations themes were collected from the interviewees and added into table 12 below. The themes were ranked in the table according to their frequency of occurrence. This demonstrates that the theme had a prominent reoccurrence amongst respondents.

Table 12: Thematic analysis – Themes on aspirations

Rank	Theme	DVF	FIN	LEG	ECO	FIN2	INC	TOTAL
1	Opportunity for growth	16	8	1	2	1	1	**29**
2	Creation of social value	7	3	2	4	1	5	**22**
3	Innovative products and processes	4	4	1	0	1	3	**13**
	TOTAL	**27**	**15**	**4**	**6**	**3**	**9**	**64**

Table 13: Thematic analysis – Quotes on aspirations

Rank	Theme	Frequency	Question	Quotes
1	Opportunity for growth	29	1	DVF: “in South Africa as much as there is opportunity it is a small market, shallow market, it is a very connected market…” DVF: “we have offices in 25 countries around the world and most of them are in emerging markets…” DVF: “when it starts to sort of have critical mass and you start to get a little bit of momentum and then legislative requirements kind of kick in…”
				FIN: “also quite unique is a very big un serviced population…” FIN: “it is very difficult for the entrepreneurial individual who takes something to a certain level to break out of that level to the next level…”

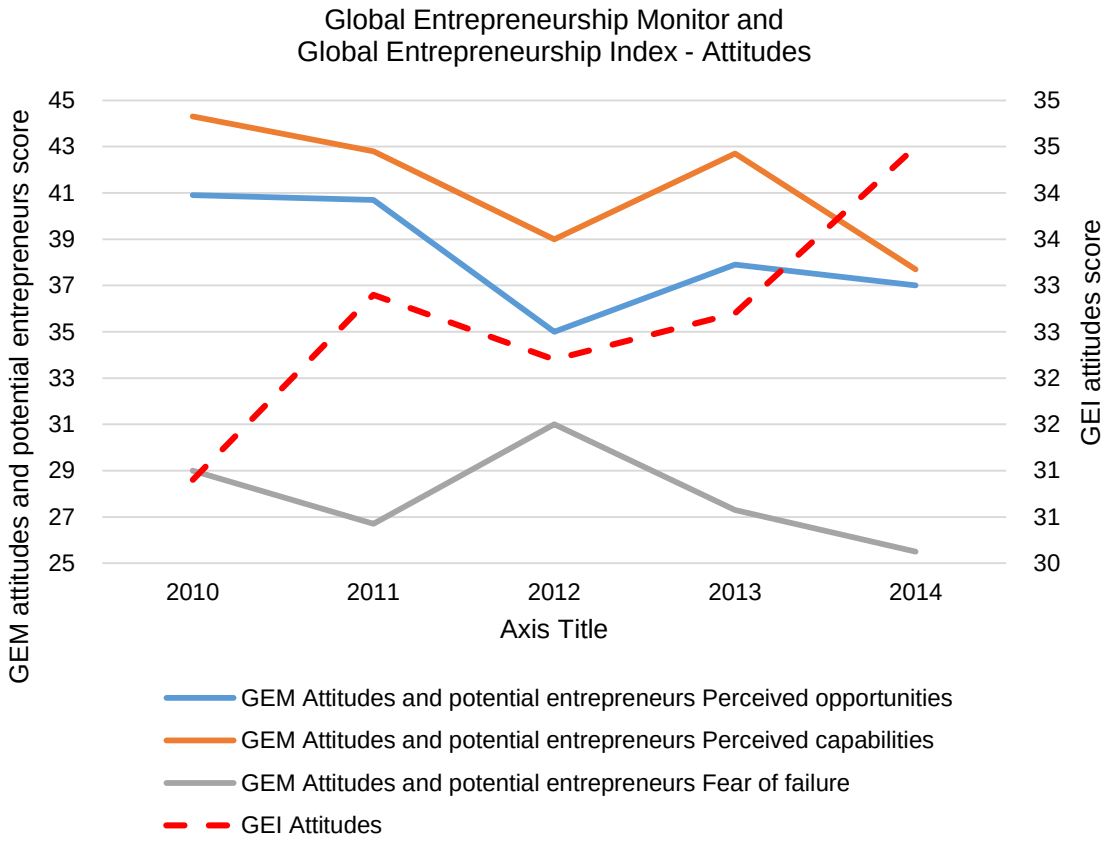
Rank	Theme	Frequency	Question	Quotes
				LEG: "So what I have found in the last ten years, maybe a little bit more, that law firms must either get slightly bigger or they must get much smaller and deliver a niche service. The middle size service are now in no man's land …"
2	Creation of social value	22	1	DVF: "in many instances there is just no transfer of value, a transfer of wealth with no value…" DVF: "I will finance you to buy this stake and you sit there and you enjoy the benefits but not entrepreneurship" DVF: "there is the idea that you are actually creating value and doing something meaningful…" DVF: "the impact that you can have on the community in which you operate…"
				FIN: "the high the quality of the people we have through education the more chance you have of success to compete in a global world…"
				ECO: "it has affected the entrepreneurial attitude and especially in the new South Africa, now a lot of the black empowerment groups, you know they want to link in with these big previous traditionally white dominated conglomerates and they squeeze out others who might want to try and break in especially small white capital that wants to break in. Oh you don't meet the empowerment requirements so you are cut out of it…" ECO: "BEE is supposed to normalize that and in fact I think has exacerbated It…"

Rank	Theme	Frequency	Question	Quotes
3	Innovative products and processes	13	1	DVF: “So I just think that we have got a number of barriers but I think that we are definitely innovative and we have got some great technology…” DVF: “we really struggle to find black entrepreneurs with a great idea…” DVF: “there are incredible opportunities for entrepreneurs to be Innovative…”
				FIN: “financial institutions, legal institutions, massive institutional capacity and it enables you to develop products…” FIN: “new concepts are not really broadening into South Africa…”
				LEG: “entrepreneurship products in terms of processes and innovation in the legal profession in the last 10 to 15 years has been huge…”

5.3.4 GEM and GEI attitudes indicators

GEM attitudes towards entrepreneurship indicators were graphed together with GEI corresponding indicators as shown in figure 14 below.

Figure 14: Global Entrepreneurship Monitor and Global Entrepreneurship Index Attitudes 2010 – 2014



Source: Global Entrepreneurship Index and Global Entrepreneurship Monitor (2010 – 2014)

Examples of quotes from the attitudes themes were collected from the interviewees and added into the table below. The themes were ranked in the table according to their frequency of occurrence. This demonstrates that the theme had a prominent reoccurrence amongst respondents.

Table 14: Thematic analysis – Themes on attitudes

Rank	Theme	DVF	FIN	LEG	ECO	FIN2	INC	TOTAL
1	Opportunity perception	18	19	13	4	13	9	**76**
2	Equal opportunity for all	15	10	6	2	4	11	**48**
3	Risk acceptance	12	10	0	1	6	9	**38**
	TOTAL	**45**	**39**	**19**	**7**	**23**	**29**	**162**

Table 15: Thematic analysis – Quotes attitudes

Rank	Theme	Frequency	Question	Quotes
1	Opportunity perception	76	1	DVF: “I think that there are a lot of prospects and a lot of opportunities especially in South Africa…” DVF: “we typically don’t live with second generation businesses…” DVF: “we constantly searching for new entrepreneurs to bringing to our pipelines across a lot of business at the start-up phase…” DVF: “in starting up a business, I don’t think it is an issue…” DVF: “in the initial start-up phase, not too many barriers for entrepreneurs…” DVF: “this is a program where we specifically only take black entrepreneurs and we look at the businesses…”

Rank	Theme	Frequency	Question	Quotes
				FIN: “in South Africa as much as there is opportunity it is a small market, shallow market, it is a very connected market…” FIN: “people are willing to risk everything, and yet have the ingredients to be a successful entrepreneur…”
				LEG: “You get pockets of people who are absolutely excellent entrepreneurs, excellent…” LEG: “There are many lawyers but quite few of them who actually start their own practices…” LEG: “has the aspirational ability to want to be an entrepreneur and have the intention to do it as well as the skills set…” LEG: “Attitude and aspirations is fundamental….” LEG: “And then you get many people who are in other extremes, they expect to succeed without the correct attitude, the correct aspiration and the correct intentions….”
2	Equal opportunity for all	48	1	FIN: “So if you were lucky enough that somebody saw you and took you under their wing and mentored you, great and if that does not happen then you never met that person and then you stuck you got a glass ceiling…” FIN: “people who have come with access to an existing family balance sheet and network…” FIN: “I have wealthy connected parents who can help kick-start a business and give me capital to get it going then I am advantaged compared to the guy who has no access to capital and no access to networks…”

Rank	Theme	Frequency	Question	Quotes
				FIN: “I think those that are previously privileged with family money definitely but that is not a specific South African issue however it is notable although it is accentuated in this country…”
3	Risk acceptance	38	1	FIN: “I think that number one thing is the willingness and desire to accept risk…” FIN: “If you compare South Africa’s success rate of entrepreneurs to other parts of the world and a lack of a cushion you know it is very risky…” FIN: “I think it is when his business basically does not go anywhere because it fails to gain critical mass…” FIN: “when I am young and I don’t really have much to lose because I do not really have a career and I don’t have a family to support…” FIN: “When you are older like in my age you know you kind of like the idea but there is a lot to lose….”
				DVF: “I think that specifically as South Africans we are quite negative…” DVF: “They chasing the cash and not a long term sort of strategic partner…” DVF: “So we find that they tend to give away too much equity too quickly…”

5.3.5 Emergent theme results

Table 16: Thematic analysis – Emergent themes

Rank	Theme	DVF	FIN	LEG	ECO	FIN2	INC	TOTAL
1	Promotion of entrepreneurship	22	18	5	14	12	4	**75**
2	Government / Legislative / Political	19	17	4	12	3	8	**63**
3	Networks	7	8	2	1	11	7	**36**
4	Destructive entrepreneurship	0	3	3	10	5	8	**29**
5	Financial / Banking	9	10	0	1	7	1	**28**
6	Failure of businesses	3	4	6	2	7	2	**24**
7	Cultural issues	0	0	0	0	0	16	**16**
	TOTAL	**60**	**60**	**20**	**40**	**45**	**46**	**271**

Table 17: Thematic analysis – Quotes emerging themes

Rank	Theme	Frequency	Question	Quotes
1	Promotion of entrepreneurship	75	1	DVF: “South Africa does not have a very strong brand as a country…” DVF: “come over to Namibia we will find a spot for you we will give you special compensation…”

Rank	Theme	Frequency	Question	Quotes
				DVF: “There is nobody to lobby government on behalf of entrepreneurs… government not supporting entrepreneurs…”
				ECO: “the government is not creating an environment that is conducive towards is and why I say it links in with education…”
				INC: “playing a huge influence on not just entrepreneurial factors but like scholastic success, professional success, credit history you know all that kind of stuff that you know other countries tend to get a lot more rights and I think they are little more on the front foot…”
2	Government / Legislative / Political	63	1	DVF: “I have a lot of entrepreneurs at the moment who are looking to set up off shore structures just because it is prohibited to do business in South Africa for those reasons…”
				FIN: “obviously the ability to navigate the bureaucracy of setting up companies and all of that I do not think it is made very easily…”
				ECO: “I think one needs to look at individual forms of legislation to the extent that legislation might entrench as I mentioned, Black Economic Empowerment might entrench the institutional power based…” ECO: “Burdens and regulations represent the top factor impeding business growth…” ECO: “structural impediments to economic growth…”

Rank	Theme	Frequency	Question	Quotes
				FIN2: “The problem is the entitlement and I think they are owed and due that and it hurts them and what it does going forward egos get as big as who knows what and you lose focus…” FIN2: “The red tape in this country is killing it…’
				INC:” more and more industries are setting up to be rent seeking…” INC: “I mean there are legislative and regulatory issues that are concerning, I mean that is a big conversation…”
3	Networks	36	1	FIN2: “Huge role, it will make you or break you…” FIN2: “As I rightly said if you know the right people you will get the right opportunities…”
				DVF: “Its everything” DVF: “It does not necessarily have to business network…” DVF: “You know every single person has a personal network. And it is how you leverage that network and make that network work for you so it’s as much about having a network as knowing how to use it…”
				INC: “if you don’t have those things like education, the dinner table you grew up around you know like networks you know it’s like those 21 year olds could have the same equal access to opportunity by are they equal…”
				INC: “So networks are huge and I think embedded in the idea of networks being a utility is the idea of social collateral so you earn it through time at the institutions typically and you know

Rank	Theme	Frequency	Question	Quotes
				there is individual networks and then there is institutional networks like you can call up the GIBS MBA from ten years ago…"
4	Destructive entrepreneurship	29	1	ECO: "the government is not creating an environment that is conducive…" ECO: "what is making it even more difficult nowadays is that obviously with black economic empowerment… stifling entrepreneurship…" ECO:" BEE is supposed to normalize that and in fact I think has exacerbated It…"
				FIN: "Do they add value on the entrepreneurial, no, they have not done anything but just actually add costs to the value chain…" FIN: "creates opportunity for quite simply the intermediary…" FIN: "Banks, well they don't hinder entrepreneurship…" FIN: "Specifically, we have FNB who do fairly well but Standard Bank is chugging along and Absa, Nedbank are non-existent in my opinion but I think these are the guys that need to at the forefront of driving entrepreneurship…"
				LEG: "FIN: "They expect to succeed… like an entitlement…" LEG: "So you not an entrepreneur because you are idle entrepreneurs, you are an entrepreneur because of what you have done or what you doing or how you conduct with towards the attitude in terms of what service you want to deliver…"

Rank	Theme	Frequency	Question	Quotes
				INC: “we recognize that as pretty illegitimate success or just at least not duly earned and that creates sort of that jaded view of people who have created money and created wealth…” INC: “I know that a lot of wealth in this last generation has been created through BEE schemes and like “tender-preneurs” and so it gives the everyday youth on the street a real like tough, like what is my role model, what is my exit, who am I aspiring to be…” INC: “Tender entrepreneurship is like what rent seekers seek it is not like making something from nothing like creating value…”
5	Financial / Banking	28	1	FIN: “if you have one country that has access to capital and one that does not, the one is going to support entrepreneurial more and the one has much high levels of education and the other gets kind of supported more…”
				DVF: “There is misperception that there is no capital available in South Africa…” DVF: “A common problems that I find that entrepreneurs have is mainly if they pick up equity too quickly…”
6	Failure of businesses	24	1	FIN2: “think it is critical to do a deep dive into the failure rather than the success…” FIN2: “when there is failure you have got to sort of drill down to where the issues are…”
				LEG: “I would say they failed because their practices are fee driven instead of driven by a striving to give a proper services…”

Rank	Theme	Frequency	Question	Quotes
7	Cultural issues	16	1	INC: “If you have kind of made it up the hard way your family has probably slaved away for like twenty years of school to pay for twenty years of school right and your parents and grandparents want return on that investment…” INC: “There is no way that you are leaving that McKenzie job right like uncles, cousins everyone is relying on that salary but the risk profile is entirely different so the risk of failure is you know could be even holding the risk of failure constant…” INC: “So it is competitive but I think what shadows that what muddies the water in South Africa is that it sort of you know often discussed like apartheid hangover…”

5.4 Conclusion

Data on entrepreneurship specifically around attitudes, aspirations and abilities was presented in this chapter. Results from the GEM and GEI studies were graphed together and demonstrated some trend patterns. Data was collected from various experts in various sectors in the field of entrepreneurship and presented in a thematic manner. Quotes were also presented in a tabular format based on themes set out in chapter four above. Additionally, emergent themes were also listed in the tables which demonstrates further insights from the industry / sector experts. A discussion on the above data / results is presented in chapter six below.

6. DISCUSSION OF RESULTS

6.1 Introduction

This chapter will discuss the presentation of findings from chapter five; linking the findings back to the need for the study in chapter one and the literature in chapter two as well as research question in chapter three. The discussion will be based on the presentation format discussed in chapter five namely;

- Results of the comparative study of frameworks used by the GEM and GEI and
- Thematic analysis of interviews combined with GEM and GEI results and findings on entrepreneurship.

6.2 Comparative study discussion on GEM and GEI framework

6.2.1 What are the studies and why are they important

Economic development is a key focus for any country and entrepreneurship is widely acknowledged as a driver behind economic development (Acs, 2006; Herrington et al., 2009; Singer et al., 2014a). Understanding the link between economic development, the manner in which a country deploys policy and its focus towards entrepreneurship depends largely on it stage of economic development (Acs, 2006; Levie & Autio, 2008; Wennekers & Thurik, 1999).

When viewing South Africa's unemployment ranking for 2013, South Africa placed in the worst 98% of countries measured (201 out of 206) (The World Bank Group, 2015). This seemingly dichotomous positioning highlights an economy that is struggling to create jobs while at the same time performing well at creating businesses.

To understand how entrepreneurship impacts economic development it is important to understand how the entrepreneur thinks, acts and feels about entrepreneurship. Ultimately the measurement of entrepreneurship variables is critical in understanding how to influence the economic ecosystem in a positive manner. This study compared the GEM and GEI frameworks to understanding if these studies align to and present a complete picture of entrepreneurial activity in South Africa.

The study of entrepreneurship is relatively new (Marcotte, 2013) but is getting the required attention in South Africa with the first policy and strategy document on small business development being formulated in South Africa in 2005 (Department: Trade and Industry. Republic of South Africa, 2005).

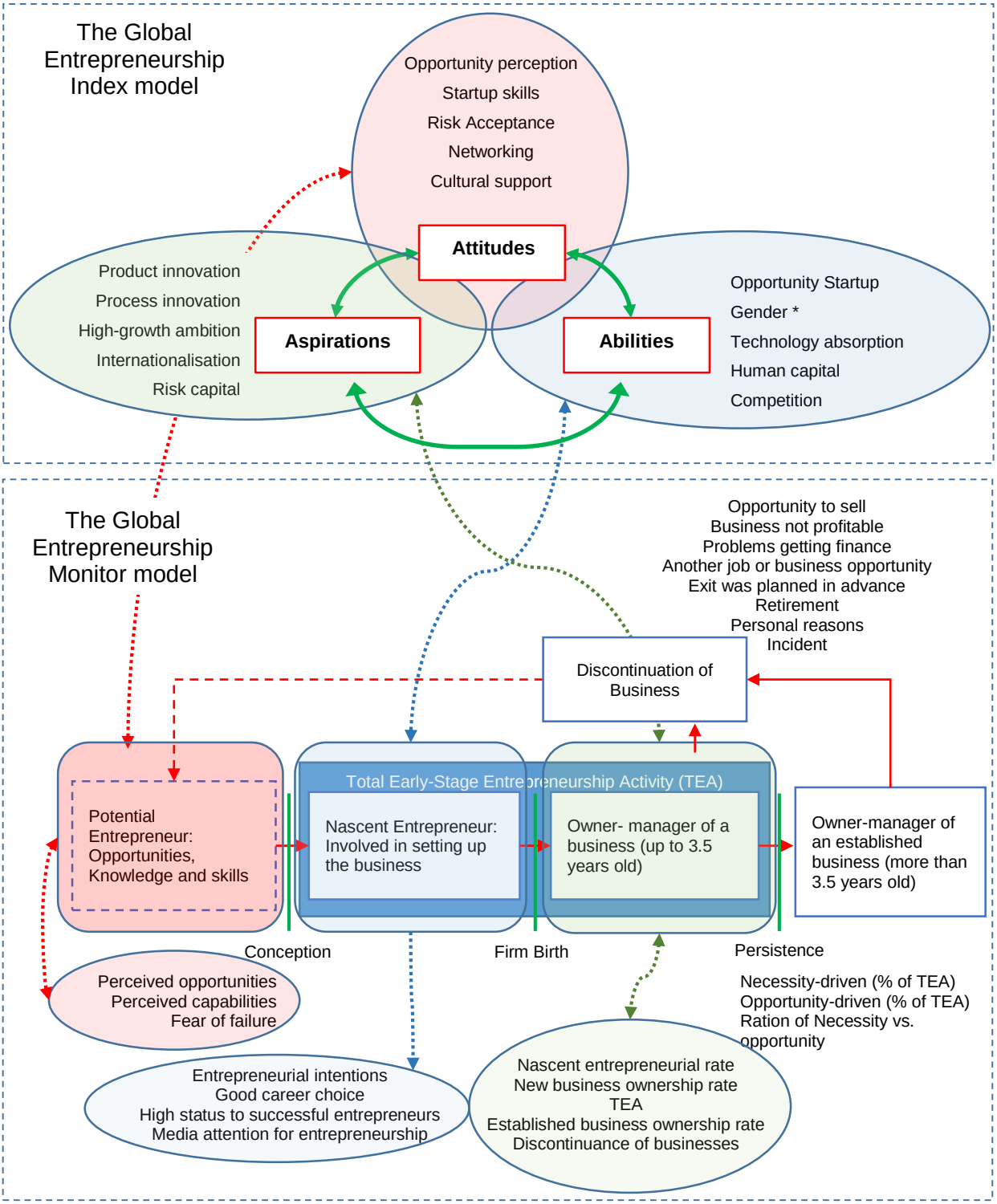
While the need to understand what entrepreneurship is and the impact it has on economic development is important (Naudé, 2008), understanding how and what is measured relative to a specific economic ecosystem may be more important. The GEM and GEI both measure entrepreneurship globally and both produce a country specific report however the question remains; if using a standardised approach / framework to measure entrepreneurship in developed countries is relevant in developing countries.

6.2.2 Discussion of the GEM and GEI methodology and framework

The Global Entrepreneurship Index study focuses on 3 core variables namely entrepreneurial attitudes, abilities and aspirations (Acs et al., 2015) while the Global Entrepreneurship Monitor study focuses on entrepreneurial attitudes, activities and aspirations (Singer et al., 2014a). Both these studies display certain similarities in their framework. These frameworks may be linked which is shown in figure 15 below.

Both frameworks align to earlier discussions in chapter two on what drives the South African entrepreneur, in that the basic ingredients need to be present in order for an entrepreneurship to take place namely; having a certain inclination / attitude towards entrepreneurship, having an aspiration towards exploiting an opportunity and some form of ability or activity towards the entrepreneurial intention (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015).

Figure 15: Linking GEI and GEM frameworks



Source: Adapted from the Global Entrepreneurship Monitor study (2014) and Global Entrepreneurship Index study (2015)

However the GEM framework encompasses an established business measure and an entrepreneurial failure measure in their model as shown in the framework (figure 15 above).

Looking beyond the start-up phase of entrepreneurship into sustainable economic growth it is clear, as Joseph Alois Schumpeter pointed out that entrepreneurship is crucial for understanding economic growth and development (Acs, 2010, p. 1). Naudé (2008) also pointed out that for economies to grow structural transformation needs to occur.

Furthermore, understanding why entrepreneurs fail is an important factor when analysing entrepreneurship. In January 2010 South Africa had an unemployment rate of 25.1% which has risen to 25.5% in the second quarter of 2014 (Statistics South Africa, 2015). While President Jacob Zuma, in his state of the nation address in 2015 set out a nine-point plan to ignite growth and create jobs in South Africa specifically in SMME's, unemployment is on the rise. Thus showing potential flaws in current national policy frameworks and supporting the need for this study.

The introduction of the GEM's additional measurements, established business and discontinuation of business, supports the literature and theory of entrepreneurship. While both the GEM and GEI studies do represent foundational measures being attitudes, activities and aspirations, the GEM framework is more comprehensive.

The findings and discussion above do not support proposition 2. While the GEI structure is limited to only the basic ingredients as discussed in chapter two (Osiri, 2015), the GEM structure is more comprehensive however both structures of the GEM and GEI results in a complete view of entrepreneurship, when comparing framework to one another. While the basic ingredients are present in both structures and are supported by literature as discussed in chapter 2, later findings in this chapter demonstrate potential gaps in using either framework when studying the South African entrepreneurial landscape.

6.2.2.1 Geographic and stage of economic development – GEM and GEI

The GEM follows the World Economic Forum typology of countries definition developmental level as a tool or method for placement of a country (economy) while the GEI calculates a countries score based on their own numerical formula and places a country (economy) into a stage. Mathews (2002) discussed how firms compete on the most basic level through competition for resources. Acs (2010) also argued that there is a correlation between the stages of economic development of countries and the arrangement of the countries workforce. This relationship is found to be S-shaped and represents stages of entrepreneurial development. As discussed in chapter two, Acs (2010) suggests that the workforce may be classified into three groups namely productive, destructive or unproductive and how the way in which the groups are arranged and the transition from one group to the next ultimately results in an economy moving from lower stages to upper stages.

Both the GEM and GEI place South Africa in the efficiency driven stage. As institutions are strengthened more entrepreneurial activity is shifted towards productive entrepreneurship, strengthening the economy (Acs, 2010). It is also the manner in which institutions and culture support entrepreneurship that results in economic development as show in the Wennekers and Turik model above (figure 1).

The same ranking of South Africa by GEM and GEI into an efficiency driven economy does not support proposition 2. The structure of the GEM and GEI studies results in a complete comparable view of South African entrepreneurial activity when comparing geographic and economic development stages. However, later findings demonstrate potential gaps in that South Africa productive entrepreneurship may be masked as destructive entrepreneurship.

6.3 Discussion - thematic analysis of results, contrasting the GEM and GEI data

6.3.1 GEM and GEI early stage entrepreneurship and abilities activity indicators

The GEI abilities measurements encompass entrepreneurial opportunity for start-up, ability to absorbed technology advancements, productive and educated human capital / employees and adequate competition in the marketplace (Acs et al., 2015). The GEM activities measurement looks at entrepreneurial opportunity / necessity driven ventures, including

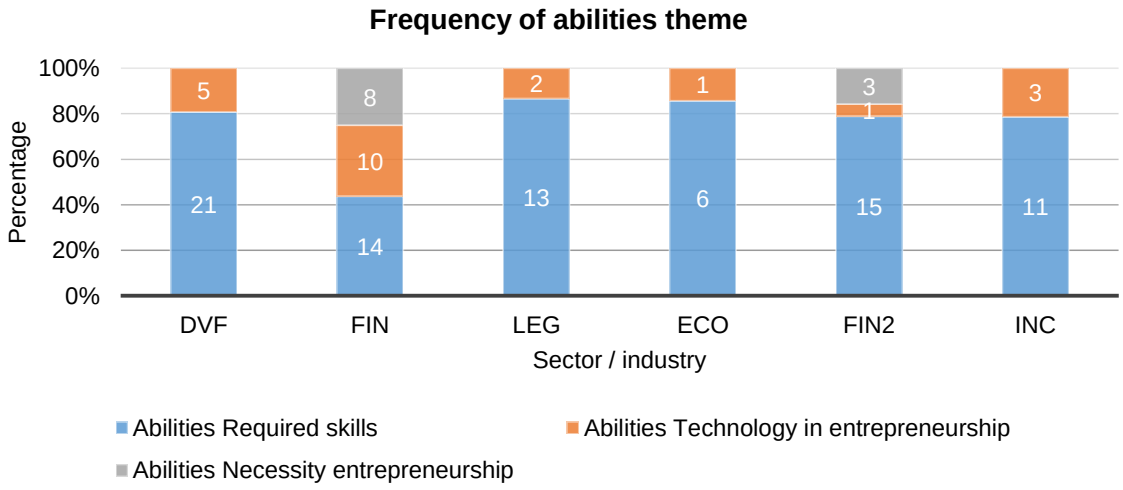
early stage entrepreneurship, inclusiveness of populations (gender, age) and identification of reasons of business / industry exists (Singer et al., 2014a).

The GEI abilities indicators were graphed together with the corresponding GEM indicators and shown in diagram 11 above. It depicts how both GEM and GEI data follow a similar trend trajectory between 2012 and 2014 however between 2011 and 2012 both studies show contradictory trending data. The GEI data shows entrepreneurial abilities are improving over the period while the GEM data shows an inverse trend in that entrepreneurial abilities are seen to decrease over the time period.

It is important to note that the GEI study utilises individual data that is generated by GEM (Acs et al., 2015). This is an interesting note, should the individual data in each report (GEM and GEI) be similar the institutional data may be the cause for the disparity between the two reports. There was not sufficient data on the GEI variables to interrogate or test at the quantitative level and thus the reason for the disparity is not known.

Interviews with industry experts revealed that the general understanding is that South Africa is lacking the necessary skills to be entrepreneurial. This can been seen in the frequency of abilities theme graph below figure 16. This demonstrated a high frequency of comments made around abilities specifically on skills which are discussed below with support of interviewee quotes.

Figure 16: Frequency of abilities from interviewees



Source: Geitlinger (2015)

Figure 16 above demonstrates what percentage of comments made on entrepreneurial abilities relate to sub-themes. This shows the conversation concentration around certain topics which supports and reinforces findings.

Certain pertinent quotes are listed below which demonstrate and provide for examples of the discussions. Each interviewee was allocated a code which is based on the sector they represent.

DVF*: "In terms of running a business they do not know how to do it"*

DVF*: "I think generally speaking those skills are lacking"*

DVF*: "their skills are lacking but I must be honest it is one of our biggest struggles, to find these entrepreneurs namely black entrepreneurs"*

LEG*: "The major stumbling block is education"*

LEG: *"has the aspirational ability to want to be an entrepreneur and have the intention to do it as well as the skills set"*

LEG: "*young entrepreneurs getting into trouble because they cannot comply with the legislative requirements in terms of controlling their administration"*

ECO*: "it ranks very highly, it is partly linked but not entirely so to the shortage of skills and the poor education outcomes"*

ECO*: "the government is not creating an environment that is conducive towards it and this is why I say it links in with education"*

ECO*: "if people can't count properly then it is difficult for them to make a success as entrepreneurs because they don't know whether they are making profits or losses or anything let alone know anything else"*

ECO*: "it is very difficult to find an appropriate person with the skills required"*

INC*: "I think that generally one of the things that called out as lacking in the ecosystem is high skill, high value added, and high sophistication enterprise"*

INC*: "I mean look at it this way, you can only innovate by blind luck if you don't really understand what already exists and that is where education comes in"*

INC*: "So I mean SA is playing on the back foot, I mean what the latest rankings like 148 out of a 150 ranked countries in math and science"*

The findings by interviewees support the GEM data shown in figure 11 above for the period 2013 – 2014. The GEM data shows a decline in entrepreneurial abilities (early stage entrepreneurial activity). The GEM data depicts no or little improvement over time 2010 – 2014.

The findings by interviewees also support the GEI data shown in figure 11 above for the period 2013 – 2014. The GEI data shows a decline in entrepreneurial abilities which correlates to the comments made by interviewees. The GEI data depicts some improvement over time 2010 – 2014. This movement over time is contradictory to the GEM data over the same period.

Understanding how the individual entrepreneurs abilities affect their behaviour as well as how institutional / national frameworks work around their behaviour and how they play an important role when identifying exploitable opportunities is key to understanding entrepreneurs within the South African context (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015). Without the necessary skills required to be entrepreneurial, a breakdown occurs in the formation of SMME and ultimately no constructive economic development may take place. This can harm the crucial elements of entrepreneurship as depicted in the Wennekers and Turik (1999) model (figure 2 above).

In conclusion, comments from interviewees do support both the GEM and the GEI findings for the period 2013 - 2014 in that entrepreneurial abilities are important and are declining. However due to the inconsistency of data for the period 2010 - 2014 the findings are that proposition 1 is found to be correct and that the GEM and GEI studies do not provide a comprehensive view of the actual entrepreneurial abilities.

6.3.2 GEM and GEI aspirations and intentions indicators

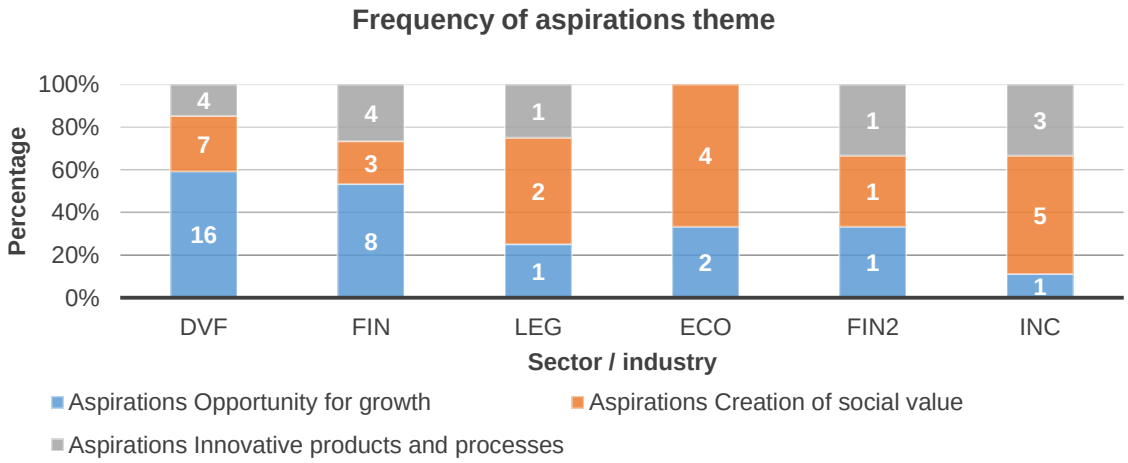
The GEI aspiration measurements encompass entrepreneurial ability for product innovation, ability for process innovation, capacity for high growth, reference to internationalisation and adequate risk capital (Acs et al., 2015). The GEM aspiration measurements encompass entrepreneurial growth, innovation, internationalisation orientation and the creation of social value (Singer et al., 2014a).

GEM aspiration indicators were graphed together with GEI corresponding indicators as shown in figure 12 above. While 2013 – 2014 data shows a corresponding trend patterns previous years 2010 – 2012 have inverse relationships between the two studies.

It is important to note that the GEI study utilises individual data that is generated by GEM (Acs et al., 2015). Both sets of data show a general decline in aspirations and intentions however the GEM data offers a more dynamic variation year on year while the GEI data does not show much variation year on year and is seen to be fairly stable over time.

Interviews with industry experts revealed that the general understanding is that South Africa is lacking the necessary aspirations to be entrepreneurial. This can been seen in the frequency of aspirations theme graph below, figure 17. This demonstrated a high frequency of comments that were made around opportunity for growth which are discussed below with support of interviewee quotes.

Figure 17: Frequency of aspirations from interviewees



Source: Geitlinger (2015)

6.3.2.1 Opportunity for growth

DVF*: "in South Africa as much as there is opportunity it is a small market, shallow market, it is a very connected market"*

DVF*: "when it starts to sort of have critical mass and you start to get a little bit of momentum and then legislative requirements kind of kick in"*

FIN*: "also quite unique is a very big un-serviced population"*

FIN*: "it is very difficult for the entrepreneurial individual who takes something to a certain level to break out of that level to the next level"*

LEG*: "So what I have found in the last ten years, maybe a little bit more, that law firms must either get slightly bigger or they must get much smaller and deliver a niche service. The middle size service are now in no man's land"*

6.3.2.2 Creation of social value

DVF*: "in many instances there is just no transfer of value, a transfer of wealth with no value"*

DVF*: "I will finance you to buy this stake and you sit there and you enjoy the benefits but not entrepreneurship"*

DVF*: "there is the idea that you are actually creating value and doing something meaningful"*

FIN*: "the higher the quality of the people we have through education the more chance you have of success to compete in a global world"*

ECO*: "now a lot of the black empowerment groups, you know they want to link in with these big previous traditionally white dominated conglomerates and they squeeze out others who might want to try and break in especially small white capital that wants to break in. Oh you don't meet the empowerment requirements so you are cut out of it"*

ECO*: "BEE is supposed to normalize that and in fact I think has exacerbated it"*

The findings by interviewees support the GEM data shown in figure 12. The GEM data shows a decline of aspirations and intentions over time 2013 – 2014. Data and findings from interviewees did not demonstrate differing views to that of GEM findings.

The findings by interviewees also supports the GEI data shown in figure 12. The GEI data shows a minimal decline of aspirations and intentions over time 2013 – 2014. Data and findings from interviewees did not demonstrate differing views to that of GEI findings.

In conclusion, the general comments from interviewees are found to be mixed in that there are no clear thoughts or direction on aspirational activity by entrepreneurs. This finding supports data from GEM and GEI however the variability between the GEM and GEI studies results in the finding that proposition 1 is found to be correct and that the GEM and GEI studies do not provide a comprehensive view of the actual entrepreneurial abilities.

6.3.3 GEM and GEI attitudes indicators

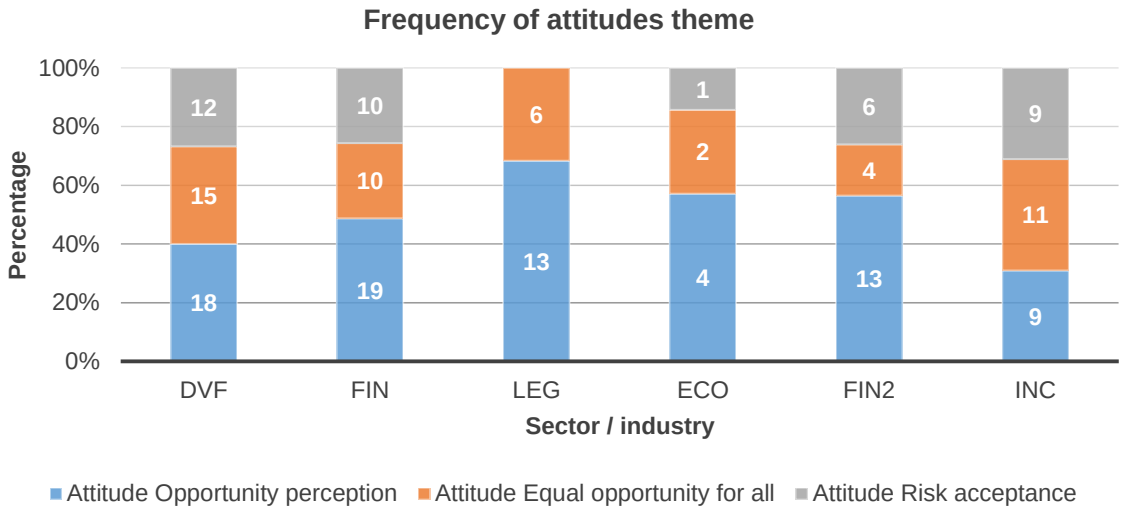
The GEI attitude measurements encompass entrepreneurial opportunity perception, start-up skills, risk acceptance, networking capabilities and cultural support from the community (Acs et al., 2015). The GEM attitude measurements encompass entrepreneurial perception of opportunities and capabilities, the fear surrounding failure of entrepreneurs and the current status of entrepreneurship in given ecosystems (Singer et al., 2014a).

GEI attitudes towards entrepreneurship indicators were graphed together with GEM corresponding indicators as shown in figure 13 above. The 2010 – 2014 data shows that the GEI data has no correlating relationship when compared to GEM data.

It is important to note that the GEI utilises individual data that is generated by GEM (Acs et al., 2015). This poses further questions as to why there is no correlation in data between the two reports.

Findings from interviewees are that there is a positive perception of opportunities in South Arica, however interviewees felt that there was not an equal opportunity for all and that the willingness to accept risk was a major deterrent. This can be seen in the frequency of attitudes theme graph below, figure 18. This demonstrated a high frequency of comments that were made around attitudes which are discussed below with support of interviewee quotes.

Figure 18: Frequency of attitudes from interviewees



Source: Geitlinger (2015)

6.3.3.1 Opportunity perception

DVF: *"I think that there are a lot of prospects and a lot of opportunities especially in South Africa"*

DVF: *"we typically don't live with second generation businesses"*

DVF: *"we constantly searching for new entrepreneurs to bringing to our pipelines across a lot of business at the start-up phase"*

DVF: *"in the initial start-up phase, not too many barriers for entrepreneurs"*

FIN: *"in South Africa as much as there is opportunity it is a small market, shallow market, it is a very connected market"*

FIN: *"people are willing to risk everything, and yet have the ingredients to be a successful entrepreneur"*

LEG: *"You get pockets of people who are absolutely excellent entrepreneurs, excellent"*

LEG*: "There are many lawyers but quite few of them who actually start their own practices"*

LEG*: "Attitude and aspirations are fundamental"*

LEG*: "And then you get many people who are in other extremes, they expect to succeed without the correct attitude, the correct aspiration and the correct intentions"*

6.3.3.2 Equal opportunity for all

FIN*: "So if you were lucky enough that somebody saw you and took you under their wing and mentored you, great and if that does not happen then you never met that person and then you stuck you got a glass ceiling"*

FIN*: "I have wealthy connected parents who can help kick-start a business and give me capital to get it going then I am advantaged compared to the guy who has no access to capital and no access to networks"*

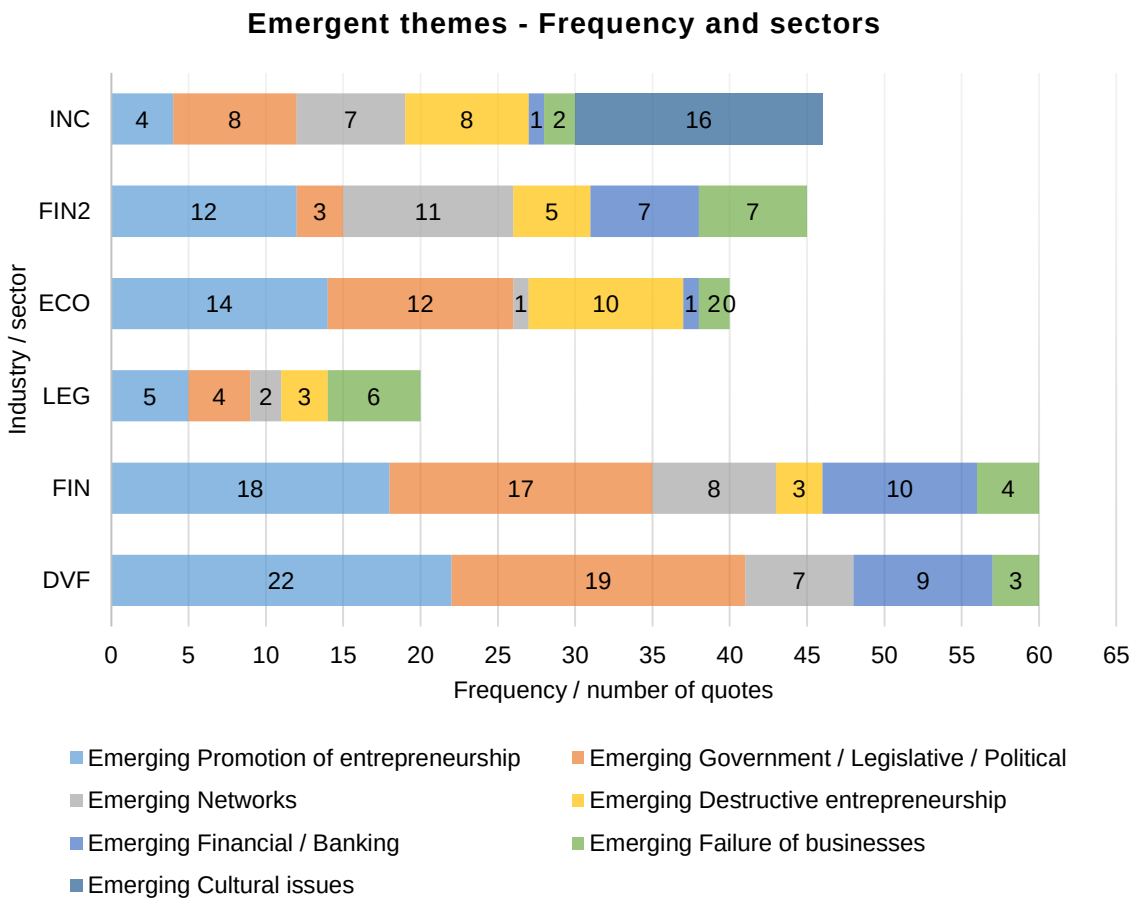
FIN*: "I think those that are previously privileged with family money definitely but that is not a specific South African issue however it is notable although it is accentuated in this country"*

In conclusion, the interviewee findings do not support the GEM study as the GEM data shown in figure 13 above depicts attitudes of entrepreneurs declining over the period 2013 - 2014. Furthermore, the GEI data shows a marginal increase in attitude over time 2013 – 2014. Thus the findings do not support either GEM or GEI study. The finding are that proposition 1 is found to be correct and that the GEM and GEI studies do not provide a comprehensive view of the actual entrepreneurial abilities.

6.3.4 Discussion on emergent theme results

The interview process revealed interesting and noteworthy emerging themes. These themes are discussed below and their relevance to the research questions are discussed with findings in support or undermining of propositions. Four of the seven major emerging themes are discussed together with quotes in support of these finding are provided. Figure 19 below shows the emergent themes with relevance and frequency to each sector measured.

Figure 19: Emergent themes – frequency and sector



Source: Geitlinger (2015)

6.3.4.1 Promotion of entrepreneurs

The frequency of comments on promotion of entrepreneurs was 75, showing a substantial interest in the topic. Interviewees found that there is little support and promotion of entrepreneurs in South Africa. The lack of a support function varied from institutional support such as government assistance through to the private sector. This is shown as a selection of quotes below.

DVF*: "There is nobody to lobby on behalf of entrepreneurs"*

DVF*: "come over to Namibia we will find a spot for you and we will give you special compensation"*

ECO*: "the government is not creating an environment that is conducive towards it"*

DVF*: "South Africa does not have a very strong brand as a country"*

DVF*: "government is not supporting entrepreneurs"*

Interviewees felt that entrepreneurs could benefit from a more active role and help with administrative functions such as how to register a company and how to obtain financial supports. Interviewees felt that government is not providing a conducive environment that promotes entrepreneurship.

6.3.4.2 Government, legislative and political concerns

The frequency of comments on government, legislative and political concerns was 63, showing a substantial interest in the topic. Most notable comments from specific interviewees are shown below and demonstrate potential gaps when measuring variables. These examples are measured within the institutional variables in the GEM and GEI studies however some concerns are specific to South Africa. These specific issues may not be evident in a standardised study that measures institutional impact in general.

DVF*: "I have a lot of entrepreneurs at the moment who are looking to set up off shore structures just because it is prohibited to do business in South Africa for those reasons"*

ECO*: "I think one needs to look at individual forms of legislation to the extent that legislation might entrench as I mentioned, Black Economic Empowerment might entrench the institutional power based"*

ECO*: "Burdens and regulations represent the top factor impeding business growth"*

ECO*: "structural impediments to economic growth"*

FIN2*: "The problem is the entitlement and I think they are owed and due that and it hurts them and what it does going forward egos get as big as who knows what and you lose focus"*

INC*:" more and more industries are setting up to be rent seeking"*

INC*: "I mean there are legislative and regulatory issues that are concerning"*

6.3.4.3 Networks in entrepreneurship

The frequency of comments on networks for entrepreneurship was 36 showing a substantial interest in the topic. Interviewees found that in general networks played a major role in entrepreneurship. More specifically networks and relationships combined with strong educational background and good family balance sheets. This suggests that while perception of opportunity is regarded as equal, opportunity for all is underpinned by certain intangible advantages. That may not be measured in a subjective manner specific to South Africa in the GEM and GEI studies.

INC*: "if you don't have those things like education, the dinner table you grew up around and networks, like those 21 year olds could have the same equal access to opportunity but are they equal"*

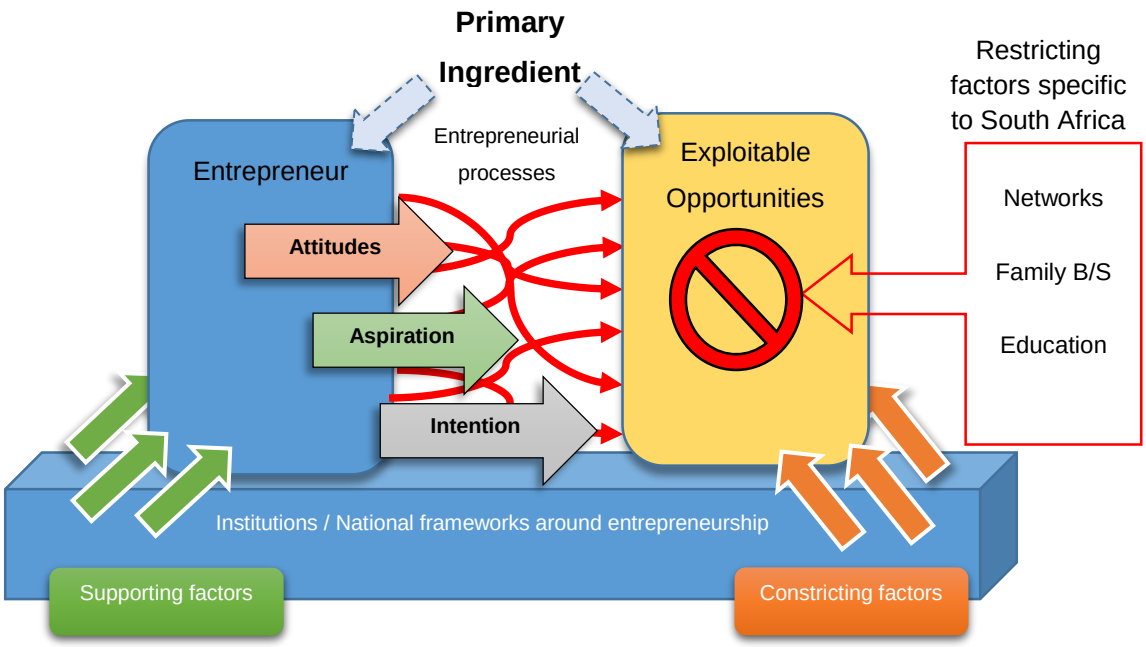
INC*: "So networks are huge and I think embedded in the idea of networks being a utility is the idea of social collateral so you earn it through time at the institutions typically and you know there is individual networks and then there is institutional networks like you can call up the GIBS MBA from ten years ago"*

FIN2*: "As I rightly said if you know the right people you will get the right opportunities"*

DVF: *"You know every single person has a personal network and it is how you leverage that network and make that network work for you so it's as much about having a network as knowing how to use it"*

The impediments specific to entrepreneurship in South Africa is shown in the adapted figure below. While the key ingredients are present, there may be underlying issues specific to the South African environment (Ali & Topping, 2011; Soomro & Shah, 2015).

Figure 20: Basic construct of the individual entrepreneur and restricting factors



Source: Geitlinger (2015)

6.3.4.4 Destructive entrepreneurship

The frequency of comments on destructive entrepreneurship was 29, showing a substantial interest in the topic. Interviewees found that in general, destructive entrepreneurship was a

notable issue impeding growth in South Africa. South Africa has various legislative programs designed to promote and assist with redistribution of wealth and uplift previously disadvantages portion of the population. While the fundamental principles were recognised and agreed upon some of the instruments namely Black Economic Empowerment were seen to be destructive in nature.

ECO*: "what is making it even more difficult nowadays is that obviously with black economic empowerment… stifling entrepreneurship"*

ECO*: "BEE is supposed to normalize that and in fact I think has exacerbated it"*

FIN*: "Do they add value on the entrepreneurial, no, they have not done anything but just actually add costs to the value chain"*

FIN*: "creates opportunity for quite simply the intermediary"*

INC*: "we recognize that as pretty illegitimate success or just at least not duly earned and that creates sort of that jaded view of people who have created money and created wealth"*

INC*: "I know that a lot of wealth in this last generation has been created through BEE schemes and like "tender-preneurs" and so it gives the everyday youth on the street a real like tough, like what is my role model, what is my exit, who am I aspiring to be"*

INC*: "Tender entrepreneurship is like what rent seekers seek it is not like making something from nothing like creating value"*

LEG*: "So you not an entrepreneur because you are idle entrepreneurs, you are an entrepreneur because of what you have done or what you doing or how you conduct with towards the attitude in terms of what service you want to deliver"*

Black economic empowerment was seen to be a topic of discussion. The basic principals were seen to be constructive however the result on economic development was seen as destructive. The GEM and GEI both measure institutional variables at large however South Africa may benefit from measuring deeper into the positive and negative impacts of these type of policy frameworks.

In conclusion, the findings of the emergent themes in general are that the GEM and GEI do not go deep enough to measure specific issues relating to South Africa. However the GEM and GEI studies do represent an accurate views of entrepreneurship in that both studies do cover promotion of entrepreneurship, institutional influences and networking. One notable finding is that while black economic development may pose as a constructive tool for empowerment and social correcting, it may be a destructive entrepreneurial and economic tool. Thus the findings do not support either GEM or GEI studies. The findings are that proposition 1 is found to be correct and that the GEM and GEI studies do not provide a comprehensive view of the actual entrepreneurial landscape specific to South Africa.

6.4 Conclusion

The aim of this project was to investigate and recognise the importance of the Global Entrepreneurship Monitor (GEM) and Global Entrepreneurship Index (GEI) reports to entrepreneurial development in South Africa and determine their relative importance to the South African entrepreneurial environment.

Literature in chapter two shows how entrepreneurship is a driver behind economic growth and development (Wennekers & Thurik, 1999) and how SMME have failed in South Africa (Berry et al., 2002). It demonstrated how South Africa faces a unique set of challenges and seeks to understand how policy makers can solve these challenges through understanding of the entrepreneurial environment (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015) by using measurement indexes such as the GEM and GEI studies.

6.4.1 Conclusion – Primary question

Research question one sought to determine if the GEM and GEI studies describe a comprehensive view of entrepreneurial activity in South Africa.

The research project discussion on findings of the GEM and GEI studies and thematic analysis of results from interviewees showed inconsistencies between data and findings. When data and findings were compared from GEM, GEI and experts in the field (interviewees) some correlation was observed however too many inconsistencies resulted in conflicting views of entrepreneurial activity in South Africa.

6.4.2 Conclusion – Secondary question

Research question two wanted to understand if there are any structural gaps in the GEM and GEI frameworks that may hinder a comprehensive view of entrepreneurial activity in South Africa.

The research project and comparative study discussion determined that both frameworks of the GEM and GEI are comprehensive in their view of entrepreneurial activity in South Africa when comparing frameworks to one another. Both GEM and GEI studies cover the basic makeup of entrepreneurship according to literature (Osiri, 2015). The GEM framework goes further into understanding what keeps existing business continuing (continuation) and also focuses on failure / closure (discontinuous) of business in its pipeline framework model.

However later findings in this chapter demonstrate potential gaps in using either framework when specifically studying the South African entrepreneurial landscape. Experts in the field of entrepreneurship suggested some of the measurement indicators may be flawed in its measurements of entrepreneurship. While entrepreneurship does exists it may be of a destructive nature / economic consequence Acs (2010) such as rent seeking. Neither report discusses productive, destructive or unproductive entrepreneurship in any detail and does not attempt to measure it. Emergent themes from interviews demonstrated how certain positive social policies may be destructive economic policies.

Ultimately both the GEM and GEI do not show any major structural gaps in framework on a global scale and when measuring consistent variables across countries however, when used locally they do demonstrate subjective gaps in a South African context.

7. CONCLUSION AND RECOMMENDATIONS

7.1 Research problem and motivation

The current study attempted to understand the extent to which the current global studies on entrepreneurship such as the Global Entrepreneurship Monitor (GEM) and Global Entrepreneurship Index (GEI) accurately reflect a complete picture of entrepreneurial activity in South Africa, and whether these reports are comparable. Furthermore, to understand if these reports reflect the opinions held by industry experts on the current state of entrepreneurship in the country.

The main motivating factor for this study was to add to the body of knowledge on entrepreneurship and provide additional information that may be of beneficial use to all stakeholders; the improvement of the South African economy, for the promotion of business and ultimately for the benefit of poor South Africans.

Literature discussed how the individual entrepreneurs attitudes, aspirations and abilities all affect behaviour within an economy (Ali & Topping, 2011; Osiri, 2015; Soomro & Shah, 2015). It goes further into making the link between the individual and South Africa and how the individual affects the success or failure of SSME's (Berry et al., 2002) and is currently a focus of government (National Planning Commission, 2012). It also links the entrepreneur into economic growth through the Wennekers and Turik (1999) model. We note the entrepreneur is not void of institutional influences nor free from influences of the macro economy (UNCTADstat, 2013; Wennekers & Thurik, 1999). This is all supported by the basic premise of theory and drivers of entrepreneurship and it becomes clear that entrepreneurship is an important academic field of study (Acs, 2010; Brouwer, 2002; Marcoux, 2012; Wennekers & Thurik, 1999) this is also evident by notable academics such as Joseph Alois Schumpeter (1883 – 1950), Frank Hyneman Knight (1885 – 1972) and Israel Kirzner (1930 -).

7.2 Principal findings

The primary research question sought to determine if the GEM and GEI studies describe a comprehensive view of entrepreneurial activity in South Africa. The research project discussion on findings of the GEM and GEI studies and thematic analysis of results from interviewees showed inconsistencies between data and findings. When data and findings

were compared between GEM, GEI and experts in the field (interviewees) some correlation was observed however too many inconsistencies resulted in conflicting views of entrepreneurial activity in South Africa.

The secondary research question wanted to understand if there are any structural gaps in the GEM and GEI frameworks that may hinder a comprehensive view of entrepreneurial activity in South Africa. The research project and comparative study discussion determined that both frameworks of the GEM and GEI are comprehensive in their view of entrepreneurial activity in South Africa when comparing frameworks to one another. Both GEM and GEI studies cover the basic makeup of entrepreneurship according to literature (Osiri, 2015) as well as experts in the field. Later findings demonstrated potential gaps in using either framework when specifically studying the South African entrepreneurial landscape. Emergent themes from interviews demonstrated how certain positive social policies may be destructive economic policies. Ultimately both the GEM and GEI do not show any major structural gaps in framework on a global scale however when used locally they do demonstrate small subjective gaps in a South African context.

7.3 Implications for management

The implications for management, institutions and countries using the GEM and GEI are immense. Currently the GEM and the GEI are the largest studies on entrepreneurship. These studies are used in determining frameworks that will ultimately support small, medium and micro sized enterprises. The support for small, medium and micro sized enterprises is ultimately the driving force behind economic development in any country.

South Africa has structural issues behind employment and economic growth and has found itself in a unique situation through apartheid; previously excluded portions of its population have created a set of issues that the country faces which are vastly different from any other economy.

One of the options available for economic development is through constructive entrepreneurship. Constructive entrepreneurial activities create spill over businesses and create sustainable economic ecosystems. As discussed by interviewees, rent seeking or destructive entrepreneurship activities may be more prevalent in South Africa. Institutions

that measure entrepreneurship may need to focus on the nature of the entrepreneurial actives being measured.

7.4 Limitations of the research

A number of limitations exist which will be discussed below. As a study of this nature has never been undertaken before, the researcher feels that additional studies should be undertaken to validate or refute findings of this project. Additionally the researcher recommends future studies focus on refined specific areas and the research is conducted at an increased granular level.

7.4.1 GEM data used in GEI reports

Certain GEI individual data was obtained from the GEM surveys and thus the researcher feels there may be a limitation on the quality of findings in this study. It is unknown how the individual data was used in the GEI. The GEI may construct reports in a manner in which it produces the variability of results and is aware of the variations when comparing data.

7.4.2 Samples size of interviewees

The sample size used in this project was limited to experts in the field of entrepreneurship. A greater sample size may support or refute findings found in this project. Additionally the experts used in the field of study may provide bias information. Therefore an additional sizable qualitative study is recommended.

7.4.3 Limitations around individual and institutional measurement

As the researcher could not construct their own model and scoring mechanism for individual and institutional data there may be some unintentional bias or weighting towards one set of variables (individual or institutional). There may have been some bias by the researcher in leading interviewees towards either individual or institutional outcomes compromising validity.

7.4.4 Non-standardised measurement frameworks

The GEM and GEI are fundamentally linked as the both measure individual and institutional variables however the exact manner in which these variables are collated and constructed into a usable unique framework may cause one study to appear to be misaligned when compared to the other. The researcher attempted to link the frameworks together in a manner which appeared to be logical; unfortunately this may not be accurate and undermine the project. Further research will be required to validate findings. The GEM framework also included two additional measurement criteria which when doing a comparative study on the GEM and GEI reports may affect the quality of results.

7.5 Suggestions for future research

7.5.1 Quantitative study into GEM and GEI data

A quantitative analytical study based upon this report, comparing raw data will provide for more comprehensive insights into the validity of this study. A quantitative study will allow a researcher to delve deeper into the numerical data using statistical methods in analysis of results and findings.

7.5.2 Success rates of foreign entrepreneurship in South Africa

One interesting note emerging from this study was on how experts in entrepreneurship viewed foreigners and their high success rate as an entrepreneur within South Africa. Some interviewees suggested that being a foreigner and the necessity or survival as an individual in a foreign country affects success rates of entrepreneurship. The lack of support from their own country / institutions necessitates being self-reliant and thus promotes an entrepreneurial culture within “foreign” communities in South Africa.

This further suggests that South Africa may be facing cultural impediments to entrepreneurship. Current social welfare policies may be impeding South African entrepreneurship and negatively affecting the individual aspirations and intentions to be entrepreneurial. This notion is predicated on the idea that apartheid has created a culture of entitlement in previously disadvantaged communities which is partly supported by this study.

Thus a study into the success rate of entrepreneurial foreigners in South Africa may shed some light on this theory.

7.5.3 Social currency and success rates of entrepreneurs

The historic advantages afforded to certain portions of the population may provide for a platform from which a greater success rate is achieved in entrepreneurial endeavours. The notion of social currency or social balance sheet earned over time emerged from interviewees. Interviewees suggest that success rates of entrepreneurs are higher in families which have increased social currency.

This theory is based on networks playing a key role. South Africa faces a unique set of issues not experienced in other countries; excluding portions of the population has had an impact on an individual's ability to use social currency or social historic currency earned by parents / advantaged family members. Having a wealthy historic social bank account provides for an advantage in not only opportunity perception but across the board of measurement points in GEM and GEI. While South Africa is seen to have equal opportunity for all, black economic empowerment policies excluded, having this social currency is not measured and thus not quantifiable. A study of this nature will create insights into how measuring South African entrepreneurship through standardised methods is not adequate and will ultimately support this study.

7.5.4 Overflow of available capital and a funding shortage

Another emergent theme from this study was how experts suggest an abundance of cheap capital available for entrepreneurs and a lack of start-up or scale-up funding being accessed. Interviewees suggest that entrepreneurs are not getting needed funding while their perceptions are that there is an abundance available.

This suggests institutional failures around the promotion of entrepreneurship however this may be a start-up skill shortage. One interviewee suggested it may be that legislative requirements may be too stringent. A study of this nature should provide insight into the reason for non-utilisation of available funds.

7.6 Concluding note

The GEM and GEI are fundamental and essential tools needed for economic promotion and development. Their importance to social benefit cannot be overrated. This research project sought to add to their outstanding work and promotion of economic prosperity for all nations worldwide. Both studies attempt to improve the lives of all and it is with great respect and admiration the researcher submits their thesis.

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APPENDIX 1 - GLOBAL ENTREPRENEURSHIP MONITOR DATA

The GEM entrepreneurial pipeline	2010	2011	2012	2013	2014	Ave SSA
1 Attitudes and potential entrepreneurs						
Perceived opportunities	40.90	40.70	35.00	37.90	37.00	**73.30**
Perceived capabilities	44.30	42.80	39.00	42.70	37.70	**77.40**
Fear of failure	29.00	26.70	31.00	27.30	25.50	**23.90**
Perceptions of good opportunities in the adult population of South Africa, 2010–2014	Source 2010	Source 2011	Source 2012	Source 2013	Source 2014	Source 2014
2 Entrepreneurial intentions						
Entrepreneurial intentions	16.70	17.60	14.00	12.80	11.80	**58.00**
Good career choice	77.50	72.70	74.10	74.00	69.60	**71.50**
High status to successful entrepreneurs	77.60	72.10	74.00	74.70	72.90	**77.60**
Media attention for entrepreneurship	78.60	73.50	72.90	78.40	72.60	**72.90**
Entrepreneurship attitudes and intentions in South Africa, 2010-2014	Source 2010	Source 2011	Source 2012	Source 2013	Source 2014	Source 2014
3 Early-stage entrepreneurial activity						
Nascent entrepreneurial rate	5.10	5.20	4.00	6.60	3.90	**14.10**
New business ownership rate	3.90	4.00	3.00	4.10	3.20	**13.00**
TEA	8.90	9.10	7.00	10.60	7.00	**26.00**
Established business ownership rate	2.10	2.30	2.00	2.90	2.70	**13.20**
Discontinuance of businesses	4.80	5.60	4.00	4.90	3.90	**14.00**
Prevalence rates (%) of entrepreneurial activity amongst the adult population in South Africa, 2010–2014	Source 2010	Source 2011	Source 2012	Source 2013	Source 2014	Source 2014

4 Established businesses

Necessity-driven (% of TEA)	36.00	34.80	32.00	30.30	28.20	**33.70**
Opportunity-driven (% of TEA)	60.70	63.40	67.00	68.60	71.30	**64.00**
Ration of Necessity vs. opportunity	0.59	0.55	0.48	0.44	0.40	**0.50**
Opportunity- and necessity-driven TEA rates amongst the adult population of South Africa, 2010 -2014	Source 2010	Source 2011	Source 2012	Source 2013	Source 2014	Source 2014

5 Business discontinuance

Opportunity to sell	1.40	2.00	1.30	2.80	5.30	**5.80**
Business not profitable	24.40	32.60	28.70	36.40	42.50	**27.70**
Problems getting finance	39.10	24.00	28.20	28.90	19.40	**20.80**
Another job or business opportunity	0.90	6.00	5.40	2.90	3.20	**6.90**
Exit was planned in advance	-	-	0.80	1.80	0.50	**3.40**
Retirement	2.10	1.90	-	0.10	-	**1.20**
Personal reasons	15.50	15.60	19.80	23.20	19.90	**16.90**
Incident	1.90	0.40	0.60	3.90	9.21	**7.08**
Reasons for business exit in South Africa, 2010–2014	Source 2013	Source 2013	Source 2013	Source 2013	Source 2014	Source 2014

APPENDIX 2 - GLOBAL ENTREPRENEURSHIP INDEX DATA

Report	Nature	Sub-Index	2010	2011	2012	2013	2014
GEI	Attitudes		30.90	32.90	32.20	32.70	34.50
GEI	Abilities		33.40	34.80	35.70	38.00	37.00
GEI	Aspirations		44.80	46.20	47.00	47.20	44.10

APPENDIX 3 – SEMISTRUTURED INTERVIEW QUESTIONS

What I am hope to gain is your opinion on the entrepreneurial landscape based on your experience. Please feel free to discuss the topic freely and delve deep into any aspect you feel in important or requires discussion.

This will be based and compared to similar variables or areas of enquiry that GEM & GEI look at in their respective studies.

1. How do you perceive (regard understand and interpret) entrepreneurial opportunities?
2. What do you understand to be the skills required to be entrepreneurial?
3. What do you perceive to be the way in which South Africans understand and comprehend entrepreneurial failure?
4. What role do networks play in successful entrepreneurial endeavours?
5. In what way is being an entrepreneur a good career choice for South Africans?
6. What is your sense on entrepreneurial product / process innovation intentions in South Africa?
7. What role does attitude, aspirations and intentions to be an entrepreneur play in developing South African entrepreneurship?
8. In what way does equal opportunity affect starting up a business? (male vs female vs ethnicity vs religion – to be free and fair in a country)
9. In what way does legislation hinder or promotes entrepreneurship?
10. What is your sense of successful entrepreneurs requiring high quality educated employees?

Dear Stephan Geitlinger

Protocol Number: **Temp2015-02254**

Title: **Entrepreneurship in South Africa: A comparative study of GEM and GEI data for period 2010 - 2014**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

Adele Bekker